



DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 127

[Docket No. USCG-2019-0444]

RIN 1625-AC52

Operational Risk Assessments for Waterfront Facilities Handling Liquefied Natural Gas as Fuel, and Updates to Industry Standards

AGENCY: Coast Guard, DHS.

ACTION: Final Rule.

SUMMARY: The Coast Guard issues this final rule amending its regulations concerning waterfront facilities handling liquefied natural gas (LNG) and liquefied hazardous gas (LHG). The final rule makes the following three changes. First, the final rule revises the Coast Guard's existing regulations to allow waterfront facilities handling LNG as fuel to conduct an operational risk assessment instead of a waterway suitability assessment (WSA) without first obtaining Captain of the Port (COTP) approval. Second, the final rule revises existing regulations to update incorporated technical standards to reflect the most recent published editions. These updated industry standards only apply to waterfront facilities handling LNG and LHG that are constructed, expanded, or modified under a contract awarded after the implementation date of the final rule. Third, for waterfront facilities handling LNG that must comply with the WSA requirements, the final rule requires these facilities to provide information to the Coast Guard regarding the nation of registry for vessels transporting natural gas that are reasonably anticipated to be servicing the facilities, and the nationality or citizenship of officers and crew serving on board those vessels.

DATES: This final rule is effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. The incorporation by reference of certain publications listed in the rule is approved by the Director of the **Federal Register** on [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: To view documents mentioned in this preamble as being available in the docket, go to <https://www.regulations.gov>, type USCG-2019-0444 in the search box and click “Search.” Next, in the Document Type column, select “Supporting & Related Material.”

FOR FURTHER INFORMATION CONTACT: For information about this document call or email Mr. Ken Smith, Project Manager, Coast Guard, Vessel and Facility Operating Standards Division, Commandant (CG-OES-2); telephone 202-372-1413, email *Ken.A.Smith@uscg.mil*.

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I. Abbreviations

API	American Petroleum Institute
ASME	The American Society of Mechanical Engineers
ASTM	ASTM International
BLS	U.S. Bureau of Labor Statistics
CFR	Code of Federal Regulations
CG-OES	Coast Guard Office of Operating and Environmental Standards
COI	Collection of information
COTP	Captain of the Port
DHS	Department of Homeland Security
DNV	Det Norske Veritas
FERC	Federal Energy Regulatory Commission
FR	Federal Register
GSA	General Services Administration
HAZID	Hazard Identification
IA	Interagency Agreement
IBR	Incorporated by reference
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
LHG	Liquefied hazardous gas
LNG	Liquefied natural gas
LOI	Letter of Intent
MISLE	Marine Information for Safety and Law Enforcement
NFPA	National Fire Protection Association
NPRM	Notice of proposed rulemaking
OFR	Office of the Federal Register
OMB	Office of Management and Budget
ORA	Operational risk assessment
PHMSA	Pipeline and Hazardous Materials Safety Administration
SBA	Small Business Administration
SME	Subject Matter Expert
SNPRM	Supplementary notice of proposed rulemaking
§	Section
U.S.C.	United States Code
WSA	Waterway suitability assessment

II. Executive Summary

The purpose of this final rule is to amend the regulations in Title 33 of the Code of Federal Regulations (CFR) part 127 concerning waterfront facilities handling liquefied natural gas (LNG)¹ and liquefied hazardous gas (LHG). The final rule makes three changes: (1) changes the risk assessment requirements for facilities that only handle LNG as fuel and do not transfer LNG as cargo to or from a vessel; (2) updates the

¹ For the purpose of simplification, in this final rule we refer to a waterfront facility handling LNG as an “LNG import/export facility” to distinguish it from an LNG fuel facility. This term is used for convenience and does not appear in the regulatory text.

technical standards already incorporated by reference in part 127; and (3) adds a requirement that LNG import/export facilities provide certain information to satisfy a statutory requirement. We discuss each change below.

First, the final rule adds new § 127.008 to allow waterfront facilities handling LNG as fuel (LNG fuel facilities^{2,3}) to conduct an operational risk assessment (ORA) instead of a waterway suitability assessment (WSA), without first obtaining Captain of the Port (COTP) approval. An ORA focuses on the safety and security associated with shore-based operations within the marine transfer area, whereas a WSA focuses on the risks and vulnerabilities of the waterway associated with an LNG import/export facility. LNG fuel facilities, as defined, do not transfer LNG as cargo to or from a vessel and so an assessment of the waterway is unnecessary. The final rule reduces the regulatory burden on LNG fuel facilities by reducing the scope of the analysis and the amount of information facility owners would have to submit to the Coast Guard. Reducing the regulatory burden could increase the maritime industry's level of interest in converting or constructing vessels to use LNG as a marine fuel to comply with stricter emissions standards and realize economic advantages.⁴

Second, the final rule updates the technical standards already incorporated by reference in part 127 to reflect the most recent published editions of these standards. We have determined that modified, expanded, and new LNG fuel facilities, LNG import/export facilities, and waterfront facilities handling LHG are built to the most

² This rule defines *LNG fuel facility* in § 127.005 to mean a waterfront facility that handles LNG for the sole purpose of providing LNG from shore-based structures to vessels for use as a marine fuel, and that does not transfer LNG to or receive LNG from vessels capable of carrying LNG in bulk as cargo.

³ *LNG fuel facility* does not include the transfer of LNG to a vessel for delivery to other vessels for use as fuel. This type of transfer operation is a transfer of LNG in bulk to a vessel capable of carrying LNG in bulk as cargo.

⁴ See the report by the Congressional Research Service, titled "LNG as a Maritime Fuel: Prospects and Policy" (dated February 5, 2019) at <https://fas.org/sgp/crs/misc/R45488.pdf>.

recent industry standards available at the time of modification, expansion, or construction, and not the outdated standards currently codified in 33 CFR part 127.⁵

Third, for LNG import/export facilities that must comply with the WSA requirements in § 127.007, the final rule requires these facilities to provide information to the Coast Guard at the time the WSA is submitted. The required information is the nation of registry for vessels transporting natural gas that are reasonably anticipated to be servicing the facilities, and the nationality or citizenship of officers and crew serving on board those vessels. We are making this change to assist us in meeting our obligation under § 304(c)(2) of the Coast Guard and Maritime Transportation Act of 2006.⁶ This statute requires the Coast Guard, when operating as a contributing agency in the Federal Energy Regulatory Commission (FERC) shoreside licensing process for an onshore or near-shore LNG terminal, to provide this information to FERC.

III Basis and Purpose, and Regulatory History

On October 5, 2020, the Coast Guard published a notice of proposed rulemaking (NPRM) in the **Federal Register** (FR) titled, “Operational Risk Assessments for Waterfront Facilities Handling Liquefied Natural Gas as Fuel, and Updates to Industry Standards.”⁷ The NPRM included a 60-day comment period. No public meetings were requested, and none were held. During the comment period for the NPRM, the Coast Guard received five comment submissions.

Chapter 700 of title 46 United States Code (U.S.C.), Ports and Waterways Safety, authorizes the Secretary of the department in which the Coast Guard is operating to take certain actions to advance port, harbor, and coastal facility safety and security.

⁵ This determination was made by direct communication with members of the LNG community through the Coast Guard’s participation on the technical committee for the National Fire Protection Association 59A titled, “Standard for the Production, Storage, and Handling of LNG,” which has approximately 50 members representing various owners, operators, and designers of waterfront facilities handling LNG and related LNG equipment suppliers, and through direct contact with owners and operators intending to build or modify waterfront facilities handling LNG.

⁶ Pub. L. 109-241, codified at 33 U.S.C. 1504(j)(2).

⁷ 85 FR 62651.

Specifically, Sections 70011 and 70034 authorize the Secretary to promulgate regulations for the handling, loading, unloading, storage, stowage, and movement of hazardous materials on a structure on or along U.S. navigable waters as necessary to protect the vessel, structure, water, or shore area. The Secretary has delegated this authority to the Commandant of the Coast Guard in DHS Delegation 00170.1, Revision No. 01.2, paragraph (II)(70).

The purpose of this final rule is to reduce unnecessary requirements for LNG fuel facilities; update technical standards that apply to all facilities covered by part 127; and implement a statutory requirement that LNG import/export facilities provide certain information.

IV. Discussion of Comments and Changes

The Coast Guard received five comment submissions during the 60-day comment period that ended on December 5, 2020. Four comment submissions were received from members of the public and one joint submission was submitted on behalf of two industry organizations. One commenter pointed out that by the time the proposed rule became final, the National Fire Protection Association (NFPA) would have adopted the 2020 edition of the NFPA 70 standard. In the NPRM, which was published on October 5, 2020, we proposed to incorporate by reference the 2017 edition of NFPA 70. After reviewing this comment, we discovered that the 2020 edition of NFPA 70 became effective on August 25, 2019. The 2020 edition features changes related to emergency disconnects, ground-fault circuit interrupter protection, surge protection, and other topics related to electrical safety. However, the provisions of the 2020 edition that would apply to regulated facilities through §§ 127.107(a) and (c), 127.201(c)(1), and 127.1107, remain unchanged from the 2017 edition. In this final rule, we incorporate by reference the 2020 edition of NFPA 70. Incorporating the most current available edition of NFPA 70 will make it easier for regulated entities to obtain the incorporated standard. Because this

change does not alter the regulatory requirements we proposed for public comment, no additional notice or opportunity for public comment is necessary.

The same commenter informed us that the ASTM International (ASTM) standard ASTM E119-20, Standard Test Methods for Fire Tests of Building Construction and Materials, approved May 1, 2020 has superseded NFPA 251. This standard provides the fire-test-response criteria and procedures for structural materials used in building construction. The application of the test procedures contained in this standard are used to evaluate the duration for which building construction materials and assemblies can either contain a fire, retain structural integrity, or both. In response to this comment, we will revise the regulatory text in this final rule in § 127.005 for the definition of the term “fire endurance rating” by deleting the reference to NFPA 251 and replacing it with the reference to ASTM E119-20. This section refers to a standard time temperature curve, which is the same in both NFPA 251 and ASTM E119-20. The NFPA provides notice on their website that it withdrew NFPA 251 in the fall of 2010⁸ and the material contained in NFPA 251 is now found in ASTM E119-20 and UL 263. Because making this change does not alter the regulatory requirements we proposed for public comment, no additional notice or opportunity for public comment is necessary.

Another commenter recommended that the best course of action for the Coast Guard would be for owners and operators continue to meet with the COTP before submitting an ORA to the Coast Guard. The commenter said this would allow safety precautions to be taken into consideration when establishing new LNG fuel facilities, while also reducing the amount of work LNG facility owners and operators would have to do to get the LNG fuel facility approved. The Coast Guard expects owners and operators to continue meeting with the COTP, but has determined that the preliminary

⁸ “Standard Methods of Tests of Fire Resistance of Building Construction and Materials,” <https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=251>. (Last visited Oct. 26, 2021). .

requirement for LNG fuel facilities to obtain the COTP's approval prior to beginning the ORA should be eliminated. Interactions will take place throughout the development of the ORA, because the Coast Guard is a key port stakeholder that must be consulted during the risk assessment process. New § 127.008(d)(1) identifies the standards to be followed for conducting an ORA and each of the standards contain provisions for either engaging with local stakeholders or the authorities having jurisdiction over the proposed LNG fuel facilities. Accordingly, the COTP will continue to work closely with owners and operators to assess the risks associated with their operation and determine whether the mitigation measures proposed are suitable. This regulatory change only eliminates the preliminary step, for certain facilities, of obtaining the COTP's approval to begin the ORA.

One commenter made reference to the 2004 Interagency Agreement (IA) titled, "For the Safety and Security Review of Waterfront Import/Export Liquefied Natural Gas Facilities" (issued on February 10, 2004), established between the Coast Guard, FERC, and the Pipeline and Hazardous Materials Safety Administration (PHMSA).⁹ The commenter stated that by allowing owners or operators to conduct an ORA, instead of a WSA, without first obtaining COTP approval appears to render the terms of the IA moot. The IA remains in effect and applies only to LNG import or export facilities, which must conduct a WSA, under § 127.007. The LNG fuel facilities this regulatory action addresses in § 127.008 will not be importing or exporting LNG, but providing LNG as fuel from shore-based structures to vessels. Accordingly, the IA does not apply to the LNG fuel facilities affected by this aspect of the final rule. Supplies of LNG will be delivered to an LNG fuel facility from shore-based sources (for example, tank trucks, rail cars, or pipelines), making waterway assessment unnecessary, because no waterborne

⁹ The IA agreement referenced by the commenter can be found at <https://www.ferc.gov/sites/default/files/2020-07/2004-interagency.pdf>. This website was accessed on October 26, 2021.

sources are used to supply LNG to the facility. LNG fuel facilities, through the ORA process, will have to assess the overall safety and security of the facilities just like LNG import or export facilities do when conducting a WSA.

The Coast Guard received one joint comment submission on behalf of two well-known oil and gas industry organizations, the Center for Liquefied Natural Gas and the American Petroleum Institute. These organizations voiced strong support for the proposed rule, noting that the LNG industry has a strong safety record and long history of working closely with regulators and first responders to maximize safety and security of both large and small LNG facilities. The commenters said that the use of an ORA instead of a WSA will benefit LNG fuel facilities and integrate the benefits of risk-based principles over the more prescriptive regulations and policies associated with conducting a WSA. The commenters said, and the Coast Guard agrees, "...that allowing an ORA to be conducted instead of a WSA would benefit waterfront facilities handling LNG as fuel. Allowing an ORA would integrate the benefits of risk-based principles over the more prescriptive regulations of a WSA. Utilizing a risk-based approach (like the ORA) effectively manages safety by allowing examination and devotion of resources on the areas of the system that pose the greatest risk to process safety, mechanical integrity, and product quality without compromising equipment care and personnel well-being." The Coast Guard also believes the ORA focuses attention on critical areas and establishes safety standards that all future LNG fuel facility owners can follow, which helps ensure a consistent approach for evaluating the safety and security concerns associated with each individual project. In this manner, maritime safety and security may be more effectively managed without unnecessary costs being imposed on the industry.

One concern raised by these commenters involved the proposed updates to the existing standards currently incorporated by reference in 33 CFR part 127, noting that updating to newer editions could cause conflict with standards that are incorporated by

reference by other government and state agencies that may share overlapping jurisdiction. In this regard, the commenters indicated that it is vital that all stakeholders, including the operators of LNG fuel facilities and personnel of agencies having jurisdiction over the facilities, have a clear understanding of which version of a standard is to be used and how that standard will be interpreted and enforced. They agree that updating existing regulations to incorporate technical standards to reflect the most recent published editions is good practice and asked that the Coast Guard attempt to ensure that standards are not in conflict with other regulatory bodies having overlapping jurisdiction. In this instance, the commenters noted that the 2001 and 2006 editions of NFPA 59A that are incorporated by reference in PHMSA's regulations (see 49 CFR 193.2013) reference different editions of ASME B31.3 and NFPA 70 than the editions we intend to incorporate. However, the Coast Guard does not believe this causes a conflict, because the regulations of both the Coast Guard and PHMSA clearly define each agency's jurisdictional boundaries. The Coast Guard has jurisdictional authority over the marine transfer areas for LNG and LHG, which are defined in § 127.005. PHMSA's jurisdictional authority, as defined in 49 CFR 193.2001, does not include marine cargo transfer areas, with the exception of siting requirements for the facility. Through its regulations, the Coast Guard makes it clear to the regulated industry that ASME B31.3-2020, referenced in § 127.1101, must be used for the construction of piping systems located in the marine transfer areas for waterfront facilities handling LHG. Also, through its regulations, the Coast Guard makes it clear to the regulated industry that NFPA 70 2020, referenced in §§ 127.107, 127.201, and 127.1107, must be used for the construction of electrical systems and warning alarms located in the marine transfer areas for LNG and LHG.

The Coast Guard agrees with many of the points raised by these commenters and understands that there may be certain circumstances when the editions of standards we incorporate by reference are different than the editions of the standards incorporated by

other state or Federal agencies. The Coast Guard has chosen to incorporate the latest editions of the standards referenced in § 127.003 in order to meet the intent of the Office of Management and Budget (OMB) Circular A-119 (Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities),¹⁰ which requires that agencies incorporate the most recent standards to enhance safety with minimum cost.

The Coast Guard coordinated with FERC and PHMSA on this rulemaking. Nonetheless, the Coast Guard intends to work with FERC and PHMSA to update the existing IA shared between the agencies, which may provide an opportunity to address differences in the editions of the standards each agency has incorporated by reference in its regulations.

The Coast Guard also received a question submitted directly to the project manager, which the Coast Guard has posted in the docket folder for transparency. The question was related to information presented in the NPRM, and asked which three facility owners the Coast Guard met with and whether there are notes or summaries from those meetings. In response, we notified the requestor that the three facilities were Tote Maritime, Harvey Gulf Marine International, and Eagle LNG. The substance of the meetings is summarized in the NPRM,¹¹ and no additional notes are available.

V. Discussion of the Rule

This final rule amends 33 CFR part 127. With this final rule, we are finalizing the following three changes:

First, the Coast Guard is revising its existing regulations to allow certain LNG fuel facilities to conduct an ORA instead of a WSA without first obtaining COTP approval to do so. By allowing LNG fuel facilities that only handle LNG as fuel and do

¹⁰ https://www.nist.gov/system/files/revise/circular_a-119_as_of_01-22-2016.pdf.

¹¹ See 85 FR 62651, at 62654.

not transfer LNG as cargo to or from a vessel to use an ORA in lieu of a WSA, without submitting an alternative request and meeting with the COTP, this final rule reduces the regulatory burden on LNG fuel facilities. This is accomplished by reducing the scope of the analysis and the amount of information facility owners will have to submit to the Coast Guard, eliminating an unnecessary administrative burden on these entities.

Second, the Coast Guard is updating the technical standards already incorporated by reference in part 127 to reflect the most recent published editions of these standards. These technical standards apply to LNG fuel facilities, LNG import/export facilities, and waterfront facilities handling LHG.

Third, for LNG import/export facilities that must comply with the WSA requirements in § 127.007, the Coast Guard is requiring these facilities to provide information at the time the WSA is submitted regarding the nation of registry for vessels transporting LNG that are reasonably anticipated to be servicing the facilities, and the nationality or citizenship of officers and crew serving on board those vessels. The Coast Guard is making this change to assist in meeting obligations under section 304(c)(2) of the Coast Guard and Maritime Transportation Act of 2006.¹² This statute requires the Coast Guard, when operating as a contributing agency in the FERC shoreside licensing process for an onshore or near-shore LNG terminal, to provide this information to FERC.

The following paragraphs explain additional, minor ways the final rule differs from the proposal on which we received public comments. None of these differences alter how the rule affects regulated entities, and so no additional notice or opportunity to comment on them is necessary.

The Coast Guard will amend the proposed authority citation for 33 CFR part 127 from “Pub. L. 109-241, sec. 304(c)(2)” to “33 U.S.C. 1504(j)(2),” because, on January 1, 2021, that section of the statute was codified at 33 U.S.C. 1504(j)(2). The authority

¹² Pub. L. 109-241, codified at 33 U.S.C. 1504(j)(2).

citation also reflects a recent revision to the delegation of authorities from the Secretary to the Coast Guard.

In the NPRM, the Coast Guard proposed to update the existing ASTM F1121-87, Standard Specification for International Shore Connections for Marine Fire Applications, by replacing the Reapproved 2010 edition with the Reapproved 2015 edition. Since publication of the NPRM, the Coast Guard learned that ASTM published ASTM F1121-87 (Reapproved in 2019) in January 2020 without change. The substantive content in the ASTM F1121-87 (Reapproved 2019) remains the same as the Reapproved 2010 and Reapproved 2015 editions. ASTM F1121-87 (Reapproved 2019) is the publication most readily available to the public. Accordingly, this final rule references the ASTM F1121-87 (Reapproved 2019) in §§ 127.003(c)(2), 127.611, and 127.1511.

Additionally, in the NPRM, the Coast Guard proposed to update the American Society of Mechanical Engineers (ASME) ASME B31.3-1993 standard by replacing it with the ASME B31.3-2018. Since publication of the NPRM, the Coast Guard learned that ASME issued ASME B31.3-2020 on June 18, 2021. As a result, the Coast Guard is incorporating the latest edition of this standard in the final rule to ensure that piping systems used on waterfront facilities handling LHG are designed and constructed in accordance with ASME B31.3-2020. This standard is a technical engineering standard used by design engineers to ensure that piping systems are safe for use with hazardous liquids under pressure. Changes between the 2018 and 2020 editions include both minor editorial corrections as well as technical changes associated with stress calculations and material selections. The changes between editions have no cost impact on owners and operators of waterfront facilities handling LHG, but rather affect the methods and considerations used by design engineers to evaluate materials and calculate stress levels in piping systems. This final rule references ASME B31.3-2020 in §§ 127.003(b)(2) and 127.1101(a).

In the NPRM, the Coast Guard proposed to update the existing ASME B16.5 standard by replacing the 1992 edition with the 2017 edition. Since publication of the NPRM, the Coast Guard learned that ASME issued ASME B16.5-2020 on January 29, 2021. The regulations in § 127.1102(a)(4)(ii) require that each hose within the marine transfer area for LHG used for the transfer of LHG or its vapors to or from a vessel must meet the flange requirements contained in ASME B16.5. This standard is a technical standard used by designers and manufacturers and has no impact on facility owners and operators. Each new edition of this standard has a table in the front of the document that identifies the changes made to the edition. After evaluating the extent of the changes to ASME B16.5-2020, the Coast Guard determined the changes deal with such things as stress calculations, new materials, and other technical items, which have no direct cost to owners and operators of LNG fuel facilities. Incorporating the latest edition available will ensure that facilities constructed after the final rule is published will be using the most recent industry standards when they are designing and constructing their transfer hose systems. Accordingly, in this final rule, reference to ASME B16.5-2020 is made in §§ 127.003(b)(1) and 127.1102(a)(4)(ii).

In the NPRM, the Coast Guard proposed new paragraph (g) of § 127.007 to require an owner or operator intending to build a new LNG facility to submit the LOI no later than the date that the owner or operator files a pre-filing request with FERC under 18 CFR 153 or 157, and include the nation of registry for, and the nationality or citizenship of officers and crew serving on board, vessels transporting natural gas that are reasonably anticipated to be servicing the LNG facility. During review of the regulatory text, we realized that it is best to include this text in existing paragraph (a), which contains the requirements for submitting an LOI to the COTP no later than the date that the owner or operator files a pre-filing request with FERC under 18 CFR parts 153 and 157. Therefore, we are moving the text from proposed new paragraph (g) to existing

paragraph (a)(1).

Because we are not finalizing the change we proposed in new paragraph (g), existing paragraphs (g) and (h) do not need to be redesignated as paragraphs (h) and (i). Therefore, new paragraph (j) is being redesignated as new paragraph (i).

VI. Incorporation by Reference

Section 127.003 of the final rule incorporates by reference 14 standards. Under 5 U.S.C. 552(a) and 1 CFR part 51, a publication is eligible for incorporation by reference if it meets Office of the Federal Register policies and is reasonably available to and usable by the class of persons affected. Regulations in part 51 require that agencies discuss, in the final rule, ways that the materials the agency incorporates by reference are reasonably available, to interested parties and how interested parties can obtain the materials. In addition, the preamble to the final rule must summarize the material.

In accordance with the OFR's requirements, section VII.L. of this final rule summarizes the major provisions of the standards that the Coast Guard incorporates by reference into § 127.003. Interested parties can purchase copies of these standards directly from the sources listed in § 127.003, or make arrangements to inspect them at a Coast Guard facility.

VII. Regulatory Analyses

The Coast Guard performed the regulatory analysis of this final rule after considering relevant existing statutes and Executive orders.

A. Regulatory Planning and Review

Executive Orders 12866 (Regulatory Planning and Review) and 13563 (Improving Regulation and Regulatory Review) direct agencies to assess the costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity).

Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility.

OMB has not designated this final rule a significant regulatory action under section 3(f) of Executive Order 12866. Accordingly, OMB has not reviewed it. A regulatory analysis follows.

The following paragraphs explain the impact of the final rule and the alternatives we considered. The Coast Guard received five comment submissions during the 60-day comment period that ended on December 5, 2020. We received one comment on the third alternative that we will address in the alternative section. We received no public comments on the estimated benefits and costs; hence, the methodology employed in the regulatory analysis remains unchanged. However, we have updated the wage rates and other prices to capture changes in these values since the publication of the NPRM. In particular, while the NPRM used 2018 values, this final rule uses 2020 wage rates and prices.

The Coast Guard's authority to address safety and security issues raised by the increased use of LNG by maritime vessels is the basis for this final rule. In this final rule, the Coast Guard is making it easier to conduct an ORA instead of a WSA for certain LNG facilities due to the size and scope of these facilities' operations. An ORA focuses on the safety and security associated with shore-based operations within the marine transfer area, whereas a WSA focuses on the risks and vulnerabilities of the waterway associated with an LNG import/export facility. ORAs and WSAs follow similar procedures for assessing risk, and the Coast Guard determined that it could narrow the scope of the assessment for an LNG fuel facility to focus on operations solely taking place at the facility if LNG tank vessels do not deliver to the facility using the associated waterway.

We estimated the benefits and costs of this final rule against the no-action baseline. We determined that removing the requirements that LNG fuel facilities submit an alternative request and meet with the COTP to conduct an ORA in lieu of a WSA has quantifiable benefits in the form of cost savings. We also determined that updating standards incorporated by reference in this final rule has unquantified benefits. Table 1 of this analysis provides a summary of the affected population, cost savings, unquantified benefits, and no-cost changes of this final rule. We estimate an annualized cost savings to industry of \$16,586 (with a 7-percent discount rate), and an annualized cost savings to the government of \$700 (with a 7-percent discount rate), for a total net annualized cost savings of \$17,287 in 2020 dollars, using a 7-percent discount rate. This is compared to the proposed rule’s estimated total net annualized cost savings of \$16,843 in 2018 dollars, using a 7-percent discount rate.

Table 1: Summary of the Impacts of the Final Rule	
Category	Summary
Applicability ¹³	New LNG import/export facilities New LNG fuel facilities New LHG Facilities
Affected Population	20 new LNG import/export facilities over the 10-year analysis period. 10 new LNG fuel facilities over the 10-year analysis period 30 new LHG facilities over the 10-year analysis period
Cost Savings to Industry (7-percent discount rate)	10-year: (\$116,496) *
	Annualized: (\$16,586) *
Cost Savings to Government (7-percent discount rate)	10-year: (\$4,918) *
	Annualized: (\$700) *
No cost requirements	Update incorporated technical standards to reflect the most recent published editions. Require the Letter of Intent (LOI) of a new LNG import/export facility to include information on the nation of registry for, and the nationality or citizenship of officers and crew serving on board, vessels transporting natural gas that are reasonably anticipated to be servicing that facility.

¹³ In this regulatory analyses, “*LNG fuel facility*” refers to a waterfront facility that handles LNG for the sole purpose of providing LNG from shore-based structures to vessels for use as a marine fuel, and that does not transfer LNG to or receive LNG from vessels capable of carrying LNG in bulk as cargo. “*LNG import/export facility*” refers to any structure on, in, or under the navigable waters of the United States, or any structure on land or any area on shore immediately adjacent to such waters, used or capable of being used to transfer liquefied natural gas, in bulk, to or from a vessel. “*LHG facility*” refers to any structure on, in, or under the navigable waters of the United States, or any structure on land or any area on shore immediately adjacent to such waters, used or capable of being used to transfer liquefied hazardous gas, in bulk, to or from a vessel. These terms are used for convenience in this preamble and do not appear in the regulatory text.

Table 1: Summary of the Impacts of the Final Rule	
Category	Summary
Unquantified Benefit	Updating standards incorporate by reference improves clarity, and alleviates discrepancies and unnecessary duplications between regulatory standards and industry best practices.

* Costs are in 2020 dollars

Affected Population

As of 2020, there are 12 existing LNG import/export facilities, 3 existing LNG fuel facilities, and 106 existing LHG facilities that are regulated under 33 CFR part 127. No new facilities have been constructed since the publication of the proposed rule. Based on the Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) database regarding activation dates of the 3 existing LNG fuel facilities and the projected activation dates of 1 LNG fuel facility under construction, we estimate that 10 new LNG fuel facilities will be built during the 10-year analysis period, or 1 annually.¹⁴ Using MISLE data on existing LNG import/export facilities, we estimate that 20 new LNG import/export facilities will be built during the 10-year analysis period, or 2 annually. Using MISLE data, we estimate that 30 new LHG facilities will be built during the 10-year analysis period, or 3 annually. However, for the purposes of this analysis, we assume that, on average, each year 3 new LHG facilities will replace 3 retiring LHG facilities for a static total population of 106 facilities. Table 2 presents the projected number of LNG import/export facilities, LNG fuel facilities, and LHG facilities over the 10-year analysis period.

This rule finalizes the three substantive changes proposed in the NPRM to existing regulations that impact different segments of the affected population. First, the final rule modifies current regulations to allow LNG fuel facilities that do not receive LNG from vessels to conduct an ORA instead of the WSA without first obtaining COTP approval per existing § 127.007, which impacts one new LNG fuel facility annually.

¹⁴ The first LNG fuel facility in the United States became operational in 2016. The second and third became operational in 2018 and 2019, respectively.

Second, the final rule updates the technical standards already incorporated by reference in part 127 to reflect the most recent published editions of these standards, which impacts one new LNG fuel facility, two new LNG import/export facilities, and three replacement LHG facilities annually. Third, the final rule requires that LNG import/export facilities must comply with the WSA requirements in § 127.007 to provide information at the time the WSA is submitted regarding the nation of registry for vessels transporting LNG that are reasonably anticipated to be servicing the facilities and the nationality or citizenship of officers and crew serving on board those vessels, which impacts two new LNG import/export facilities annually.

	Table 2: Total Facilities by Year									
Year	LNG Import/Export Facilities			LNG Fuel Facilities			LHG Facilities			
	Existing Facilities	New Facilities	Total	Existing Facilities	New Facilities	Total	Existing Facilities	New Facilities	Retiring Facilities	Total
1	12	2	14	3	1	4	106	3	3	106
2	14	2	16	4	1	5	106	3	3	106
3	16	2	18	5	1	6	106	3	3	106
4	18	2	20	6	1	7	106	3	3	106
5	20	2	22	7	1	8	106	3	3	106
6	22	2	24	8	1	9	106	3	3	106
7	24	2	26	9	1	10	106	3	3	106
8	26	2	28	10	1	11	106	3	3	106
9	28	2	30	11	1	12	106	3	3	106
10	30	2	32	12	1	13	106	3	3	106

Benefits

Cost savings to industry

The quantified benefits of this final rule are due to the cost savings associated with the new requirement allowing businesses that intend to build an LNG fuel facility, modify an existing LNG fuel facility, or reactivate an inactive LNG fuel facility to complete an LOI and ORA instead of an LOI and a WSA without submitting an alternative request and meeting with the COTP.

Currently, an owner intending to build a new LNG fuel facility has the option of either (1) meeting with the COTP and submitting an alternative request to complete an ORA; or (2) completing a traditional WSA that focuses on the traffic, security, and navigational hazards of the affected waterway in addition to operational risk. With the final rule, an owner intending to build a new LNG fuel facility can conduct an ORA in lieu of a WSA without submitting an alternative request and having a preliminary meeting with the COTP, resulting in cost savings. The remainder of this regulatory analysis presents the cost savings associated with this change.

As noted in the “Affected Population” section of this analysis, there are currently three active LNG fuel facilities and one LNG fuel facility under construction. Of these four facilities, three submitted alternative requests and received permission to conduct an ORA under existing alternative methods because the Coast Guard determined that an ORA was more appropriate for their intended LNG operations. The other LNG fuel facility chose to complete a WSA and thus did not submit an alternative request. Based on this background information and discussions with subject matter experts (SMEs) in the Coast Guard Office of Operating and Environmental Standards (CG-OES), we estimate that, going forward, 75 percent of the LNG fuel facilities will submit an alternative request and complete an ORA and the other 25 percent will complete a WSA (see table 3 below).

According to the OMB-approved collection of information (COI) (Control Number 1625-0049), completing an alternative request requires 2 clerical hours and 8 managerial hours. The mean hourly wage rates in 2020 for clerks and managers from the U.S. Bureau of Labor Statistics (BLS) were \$29.50 and \$77.48, respectively.¹⁵ To account for the cost of employee benefits, such as vacation time and health insurance, we multiplied the mean hourly wage rates by a load factor of 1.62, resulting in a loaded mean hourly wage rate of about \$47.79 for a clerk ($\29.50×1.62) and \$125.52 for a manager ($\77.48×1.62).¹⁶

Therefore, we estimate the labor cost of completing an alternative request to be about \$1,100, which includes \$95.58 in clerical labor cost (2 clerical hours \times \$47.79 per hour) and \$1,004.16 in managerial labor cost (8 managerial hours \times \$125.52 per hour). With this final rule, LNG fuel facilities will no longer submit an alternative request to complete an ORA; therefore, each new facility that requests an ORA will have a one-time benefit of \$1,100. As shown in table 3, given that 75 percent of new facilities will submit an alternative request, we estimate the annualized cost savings to industry to be about \$825, using a 7-percent discount rate.

¹⁵ We used 2020 wage data from the U.S. Bureau of Labor Statistics' Occupational Employment Statistics for the natural gas distribution sector using the North American Industry Classification System with an industry code of 221200. Readers can view the wage rates at https://www.bls.gov/oes/2020/may/naics4_221200.htm. Note that we used the occupational code of Information and Record Clerks, OC 43-4000, as a proxy for the labor category "clerk", and the occupational code of Architectural and Engineering Managers, OC 11-9041, as a proxy for the labor category "manager" as a manager with some engineering knowledge is expected to be involved in completing the alternative request.

¹⁶ To obtain the load factor, we divided the total cost for employers by the wages and salaries of private workers for the utility sector in December 2020, or \$67.62 divided by \$41.64 equals 1.62. Readers can find this information in Table 4 of the Employer Costs for Employee Compensation December 2020 News Release available at https://www.bls.gov/news.release/archives/ecec_03182021.htm.

Table 3: Discounted Cost Savings to Industry of No Longer Completing an Alternative Submission (\$2020)

Year	Total Decrease in Cost	Percent (%) of Facilities Completing Alternative	Undiscounted Cost Savings	Cost Savings Discounted at 3%	Cost Savings Discounted at 7%
(a)	(b)	(c)	(d)=(b)×(c)	(e)=(d)÷(1.03)^(a)	(f)=(d)÷(1.07)^(a)
1	\$1,100	0.75	\$825	\$801	\$771
2	\$1,100	0.75	\$825	\$777	\$720
3	\$1,100	0.75	\$825	\$755	\$673
4	\$1,100	0.75	\$825	\$733	\$629
5	\$1,100	0.75	\$825	\$711	\$588
6	\$1,100	0.75	\$825	\$691	\$550
7	\$1,100	0.75	\$825	\$671	\$514
8	\$1,100	0.75	\$825	\$651	\$480
9	\$1,100	0.75	\$825	\$632	\$449
10	\$1,100	0.75	\$825	\$614	\$419
Total			\$8,248	\$7,036	\$5,793
Annualized				\$825	\$825
Totals may not sum due to independent rounding.					

As part of requesting an alternative approval to conduct an ORA, the requesting party meets with the COTP to discuss the alternative. These meetings require representatives of the requesting firm to travel to meet with the COTP. The travel costs associated with these meetings mainly depend on the distance between the firm's headquarters and the site selected for the new LNG fuel facility. Review of the headquarters locations and the site locations of existing and under construction LNG fuel facilities in our MISLE database suggests that 75 percent of the facilities are approximately an 80-mile round trip drive from the COTP; therefore, we assume the representatives of these facilities will drive to the meeting. Flight travel will be required for visits to the other 25 percent of facilities.¹⁷ Moreover, discussions with Coast Guard SMEs in CG-OES revealed that a meeting lasts for an average of 2 hours and involves two managerial employees, one technical employee (engineer) and one outside consultant hired by the firm.

We estimate that it takes approximately 2 hours to complete the 80-mile round trip drive. Accordingly, including driving time, we estimate the duration of the meeting to be about 4 work hours. The BLS reported a mean hourly wage rate for an engineer to be \$54.18 in 2020; using a load factor of 1.62, we obtained a loaded mean hourly wage rate of about \$87.77 ($\54.18×1.62).¹⁸ Discussions with industry consultants revealed that the mean hourly wage rate for a consultant completing WSAs and ORAs for LNG

¹⁷ Of the four LNG fuel facilities (three existing and one projected to be operational in the future), three of the facilities are, on average, within an 80-mile round trip from their respective headquarters. One facility located in Jacksonville, FL is an approximately 1,700-mile round trip from its headquarters' location in Houston, TX. Based on this information, we assume that 75 percent of participants will drive while the other 25 percent will fly.

¹⁸ We calculated an engineer's mean hourly wage using 2020 wage data from BLS' Occupational Employment Statistics for the natural gas distribution sector using the North American Industry Classification System with an industry code of 221200. Readers can use the link https://www.bls.gov/oes/2020/may/naics4_221200.htm. Note that the occupational code for engineers is OC 17-2000.

fuel facilities was about \$229 in 2017.¹⁹ Using the inflation factor of 1.0549, we estimate the consultant mean hourly wage rate to be about \$242 in 2020 dollars.²⁰

We estimate the total labor cost per meeting when industry representatives drive to meet with the COTP to be about \$2,323 annually, which is the sum of \$351.08 in engineer's labor cost (4 hours \times \$87.77), \$1,004.16 in manager's labor cost (2 managers \times 4 hours \times \$125.52), and \$968 for the consultant's labor cost (4 hours \times \$242).

To calculate the cost of driving to the COTP's facility, we use the 2020 General Services Administration (GSA) reimbursable rate for personal vehicles, \$0.575 per mile, which considers the cost of fuel, depreciation, maintenance, and insurance.²¹ Accordingly, the Coast Guard estimates that an 80-mile round trip drive to the COTP costs about \$46 (80 miles \times \$0.575 per mile) per new facility.

With this final rule, industry representatives will no longer need to drive to meet with the COTP to submit and discuss the alternative, resulting in an annual benefit of \$2,369 per meeting (\$46 driving cost + \$2,323 in labor cost). As shown in table 4, given that about 56.25 percent of the new LNG fuel facility representatives will drive to the COTP, we estimate the annualized cost savings to industry of not having to drive to the COTP to discuss an alternative request to be about \$1,327 using a 7-percent discount rate.²² We estimate the discounted cost savings to industry of not driving to meet with a COTP to be about \$9,319 over a 10-year period of analysis, using a 7-percent discount rate.

¹⁹ Discussion with consultants reveal that, on average, in 2017, completing a WSA costs \$114,585 and takes about 500 hours. Based on this information, we estimate the mean consultant wage rate to be about \$229.17 (\$114,585 divided by 500 hours equals \$229.17 per hour) in 2017.

²⁰ To obtain the inflation factor, we divided the GDP deflator for 2020 (113.625) by the GDP deflator for 2017 (107.710), which equals 1.054915.

²¹ Readers can view the 2020 reimbursable rates for personal vehicles at <https://www.gsa.gov/travel/plan-book/transportation-airfare-pov-etc/privately-owned-vehicle-mileage-rates/pov-mileage-rates-archived>.

²² We obtained 56.25 percent by multiplying the proportion of facilities submitting alternative (75 percent) by the proportion driving to the COTP (75 percent) (i.e., 0.75 multiplied by 0.75 equals 0.5625).

Year	Travel Cost	Labor Cost	Total Change in Cost	Percent (%) of Facilities*	Undiscounted Cost Savings	Cost Savings Discounted at 3%	Cost Savings Discounted at 7%
(a)	(b)	(c)	(d)=(b)+(c)	(e)	(f)=(d)×(e)	(g)=(f)÷(1.03)^(a)	(h)=(f)÷(1.07)^(a)
1	\$46.00	\$2,323	\$2,369	0.56	\$1,327	\$1,288	\$1,240
2	\$46.00	\$2,323	\$2,369	0.56	\$1,327	\$1,251	\$1,159
3	\$46.00	\$2,323	\$2,369	0.56	\$1,327	\$1,214	\$1,083
4	\$46.00	\$2,323	\$2,369	0.56	\$1,327	\$1,179	\$1,012
5	\$46.00	\$2,323	\$2,369	0.56	\$1,327	\$1,144	\$946
6	\$46.00	\$2,323	\$2,369	0.56	\$1,327	\$1,111	\$884
7	\$46.00	\$2,323	\$2,369	0.56	\$1,327	\$1,079	\$826
8	\$46.00	\$2,323	\$2,369	0.56	\$1,327	\$1,047	\$772
9	\$46.00	\$2,323	\$2,369	0.56	\$1,327	\$1,017	\$722
10	\$46.00	\$2,323	\$2,369	0.56	\$1,327	\$987	\$674
Total					\$13,268	\$11,318	\$9,319
Annualized						\$1,327	\$1,327

Totals may not sum due to independent rounding.
 * The fraction of facilities submitting an alternative for an ORA (0.75) multiplied by the fraction of industry representatives driving to the COTP (0.75).

As stated above, we assume that 25 percent of the facilities submitting alternative requests will fly representatives to meet with the COTP. We estimate that, including travel time, the trip will take approximately 12 work hours.²³ Accordingly, the labor cost per meeting will be about \$6,970, which is the sum of \$1,053 for an engineer's labor cost (12 hours \times \$87.77 per hour), \$3,012 for a manager's labor cost (2 managers \times 12 hours \times \$125.52 per hour), and \$2,904 for a consultant's labor cost (12 hours \times \$242 per hour).

To calculate the cost of flying to the COTP's facility, we first computed the cost of a plane ticket, hotel, rental car, and per diem.²⁴ We estimate the cost of each round trip flight (non-stop) to be about \$275, for a total flight cost of \$1,100 (4 flight tickets \times \$275 per round trip flight ticket).²⁵ The Coast Guard assumes that each individual spends a night in a hotel at a cost of \$110 per night,²⁶ for a total cost of \$440 (4 rooms \times \$110 per night). We assume that the four representatives will share a rental car estimated to cost \$63 for transit to and from the airport and the meeting.²⁷ We also assume that each individual needs about 2 days of meals and incidental allowance (first and last day of travel), which is about \$41.25 per day per person for a total of \$330 (\$41.25 per day \times 2 days \times 4 persons).²⁸ Accordingly, we estimate the total cost of flight travel to be about \$1,933, which includes the cost of plane tickets (\$1,100), cost of overnight

²³ This estimate is based on the travel time between one LNG fuel facility's headquarters—which is in Houston—and its facility location—which is in Jacksonville, FL.

²⁴ As the future location of new facilities and the corresponding headquarters of these facilities are unknown, we use national averages for flight costs, lodging expenses, and per diems.

²⁵ U.S. Bureau of Transportation Statistics (<https://www.bts.gov/content/national-level-domestic-average-fare-series>) reports the average cost of a domestic U.S. flight on a quarterly basis. We estimate the mean cost of domestic flight to be \$275 in 2020.

²⁶ We multiplied the 2020 standard GSA rate for lodging (\$96)—which can be found at FY 2020 Per Diem Rates for Federal Travelers Released, GSA—by the national mean lodging tax rate of 14.10 percent—which can be found at HVS, 2020 HVS Lodging Tax Report - USA—for a total cost of \$110 per night (\$96 per night multiplied by 14.10 percent tax equals \$110 per night) in 2020 dollars.

²⁷ We used the \$50 cost estimate of a round trip airport transfer from the “Validation of Merchant Mariners’ Vital Information and Issuance of Coast Guard Merchant Mariner’s Licenses and Certificates of Registry” interim rule (71 FR 2154, January 13, 2006) as a proxy for the cost of a round trip airport transfer, and traveling to and from the meeting. We adjusted the \$50 amount to 2020 dollars using an inflation factor of 1.2616, which is obtained by dividing 2020 GDP deflator (113.625) by 2006 GDP deflator (90.066) (i.e., 113.625 divided by 90.066 equals 1.2616). So, we estimate the airport transfer cost to be about \$63 (\$50 multiplied by 1.2616 equals \$63) in 2020 dollars.

²⁸ The 2020 GSA rate for meals and incidental expenses for first and last day of travel is \$41.25 (See FY 2020 Per Diem Rates for Federal Travelers Released, GSA).

accommodations (\$440), cost of a rental car (\$63), and per diem expenses (\$330).

Hence, we estimate that this final rule will result in an annual cost savings of about \$8,903 per meeting (\$1,933 in transportation cost and \$6,970 in labor cost), as industry representatives will no longer need to fly to meet with the COTP. Given that 18.75 percent of the new LNG fuel facilities (one facility a year) will choose to fly representatives to meet with the COTP, we estimate the annualized cost savings to industry of not flying will be about \$1,669 ($\$8,903 \times 1 \text{ facility} \times 0.75 \times 0.25$) using a 7-percent discount rate, where 0.75 is the fraction of facilities submitting an alternative and 0.25 is the fraction flying to meet the COTP.²⁹ Moreover, we estimate the discounted or the present value cost savings to industry of not flying to meet with the COTP to be \$11,724 over a 10-year period of analysis, using a 7-percent discount rate. See table 5 for details.

²⁹ We obtained 18.75 percent by multiplying the proportion of facilities submitting alternative (75 percent) by the proportion flying to the COTP (25 percent) (i.e., 0.25 multiplied by 0.75 equals 0.1875).

Table 5: Discounted Industry Cost Savings of No Longer Meeting with COTP (Flight) (\$2020)

[illegible]

Based on reviews of data in MISLE and discussions with Coast Guard SMEs, we determined that, of the four LNG fuel facilities (three existing and one under construction), three submitted an alternative request and completed an ORA and one completed a WSA. Accordingly, we estimate that under the existing regulatory requirements, 25 percent of LNG fuel facilities complete a full WSA instead of submitting an alternative request. With this final rule, new LNG fuel facilities no longer need to complete a WSA when an ORA is a more appropriate and cheaper alternative. Discussions with industry representatives revealed that consulting firms take approximately 289 hours to complete an ORA and 500 hours to complete a WSA. Accordingly, we estimate the average cost to complete a WSA to be \$121,000 (500 consultant hours \times \$242 per hour) and the average cost to complete an ORA to be \$69,938 (289 consultant hours \times \$239 per hour); hence, completing an ORA instead of a WSA results in a cost savings of about \$51,062.

Table 6 presents the annualized cost savings to industry for completing an ORA in lieu of a WSA. Given that only 25 percent of new facilities complete a WSA, we estimate the total annualized cost savings to industry of completing an ORA in lieu of a WSA to be approximately \$12,766 ($\$51,062$ in cost savings \times 1 facility \times 0.25 of facilities that submit WSAs), using a 7-percent discount rate. We estimate the total discounted or present value cost savings of completing an ORA in place of a WSA to be about \$89,660 over a 10-year period of analysis, using a 7-percent discount rate.

Table 6: Discounted Cost Savings to Industry of Completing ORAs as Opposed to WSAs (\$2020)					
Year	Total Change in Cost	Total Number of New LNG Fuel Facilities	Total Cost Savings	Cost Savings Discounted at 3%	Cost Savings Discounted at 7%
(a)	(b)	(c)	(d)=(b)×(c)	(j)=(i)÷(1.03)^(a)	(k)=(i)÷(1.07)^(a)
1	\$51,062	0.25	\$12,766	\$12,394	\$11,930
2	\$51,062	0.25	\$12,766	\$12,033	\$11,150
3	\$51,062	0.25	\$12,766	\$11,682	\$10,420
4	\$51,062	0.25	\$12,766	\$11,342	\$9,739
5	\$51,062	0.25	\$12,766	\$11,012	\$9,102
6	\$51,062	0.25	\$12,766	\$10,691	\$8,506
7	\$51,062	0.25	\$12,766	\$10,380	\$7,950
8	\$51,062	0.25	\$12,766	\$10,077	\$7,430
9	\$51,062	0.25	\$12,766	\$9,784	\$6,944
10	\$51,062	0.25	\$12,766	\$9,499	\$6,489
Total			\$127,655	\$108,892	\$89,660
Annualized				\$12,766	\$12,766
Totals may not sum due to independent rounding.					

Table 7 contains the total cost savings to industry of removing the requirements that LNG fuel facilities submit an alternative request and meet with the COTP to conduct an ORA in lieu of a WSA. We estimate the total present value or discounted cost savings to industry of this final rule over a 10-year period of analysis to be about \$116,496 in 2020 dollars, using a 7-percent discount rate. We estimate the annualized cost savings to industry to be about \$16,586 in 2020 dollars, using a 7-percent discount rate.

Table 7: Total Industry Cost Savings (\$2020)

Year	Cost Savings Item				Total Cost Savings (undiscounted)	Cost Savings Discounted at 3%	Cost Savings Discounted at 7%
	Alternative Submission	Industry Cost for Driving to Meeting with COTP	Industry Cost for Flying to Meeting with COTP	ORA Instead of WSA			
(a)	(b)	(c)	(d)	(e)	(f)=(b)+(c)+(d)+(e)	(g)=(f)÷(1.03) ^(a)	(h)=(f)÷(1.07) ^(a)
1	\$825	\$1,327	\$1,669	\$12,766	\$16,586	\$16,103	\$15,501
2	\$825	\$1,327	\$1,669	\$12,766	\$16,586	\$15,634	\$14,487
3	\$825	\$1,327	\$1,669	\$12,766	\$16,586	\$15,179	\$13,539
4	\$825	\$1,327	\$1,669	\$12,766	\$16,586	\$14,737	\$12,654
5	\$825	\$1,327	\$1,669	\$12,766	\$16,586	\$14,308	\$11,826
6	\$825	\$1,327	\$1,669	\$12,766	\$16,586	\$13,891	\$11,052
7	\$825	\$1,327	\$1,669	\$12,766	\$16,586	\$13,486	\$10,329
8	\$825	\$1,327	\$1,669	\$12,766	\$16,586	\$13,093	\$9,653
9	\$825	\$1,327	\$1,669	\$12,766	\$16,586	\$12,712	\$9,022
10	\$825	\$1,327	\$1,669	\$12,766	\$16,586	\$12,342	\$8,432
Total					\$165,863	\$141,485	\$116,496
Annualized						\$16,586	\$16,586

Totals may not sum due to independent rounding.

Cost Savings to Government

Under the current regulation in § 127.017, the Coast Guard must review alternative requests submitted by facilities seeking to conduct an ORA in lieu of WSA and meet with facility representatives at the COTP to discuss the alternative. With this final rule, the Coast Guard no longer needs to review alternative requests, meet with facility representatives, and review a WSA, resulting in benefits, in the form of cost savings, to the Federal Government.

According to the OMB-approved COI (Control Number 1625-0049), reviewing an alternative request requires 4 hours of enlisted staff time (2 hours of E-5 time and 2 hours of E-6 time) and 1 hour of two officers' time combined (0.5 hours of O-2 time and 0.5 hours of O-3 time).

To estimate the labor cost of reviewing alternative requests, we used loaded hourly wage rates of officers and enlisted staff members in Commandant Instruction 7310.1U, Coast Guard Reimbursable Standard Rates. For the 2020 fiscal year, the loaded hourly wage rates for O-2, O-3, E-5, and E-6 employees were \$70, \$84, \$54, and \$62, respectively.³⁰ Accordingly, we estimate the total labor cost of reviewing an alternative request to be about \$311 (see table 8 for details).

³⁰ Readers can find the wage rates of officers and enlisted staff members on page 2 of Enclosure 2 of the Commandant Instruction 7310.1U: REIMBURSABLE STANDARD RATES, COMDTINST 7310.1U (https://media.defense.gov/2020/Mar/04/2002258826/-1/-1/0/CI_7310_1U.PDF).

Table 8: Government Cost Savings for No Longer Reviewing Alternative Requests (\$2020)

Employee Code	Loaded wage (a)	Hours		Cost		Cost Savings (f)=(e)-(d)
		Baseline (b)	Post-rule (c)	Baseline (d)=(a)×(b)	Post-rule (e)=(a)×(c)	
E-5	\$54	2	0	\$108	\$0	\$108
E-6	\$62	2	\$0	\$124	\$0	\$124
O-2	\$70	0.5	0	\$35	\$0	\$35
O-3	\$84	0.5	0	\$42	\$0	\$42
Total		5	0	\$309	\$0	\$309

Given that 75 percent of LNG fuel facilities have currently submitted an alternative request, and given that we estimate one submission annually, we estimate the annualized cost savings to the Federal Government of no longer reviewing these requests to be about \$232 ($\$309 \text{ in cost saving} \times 1 \text{ facility} \times 0.75$), using a 7-percent discount rate.

In addition to reviewing the alternative request, Coast Guard staff must also meet with representatives of the firm submitting the alternative request. Discussions with Coast Guard SMEs in CG-OES revealed that the meetings involve O-3 and O-4 level Coast Guard staff and last 2 hours. According to the Commandant Instruction 7310.1U, Coast Guard Reimbursable Standard Rates, for the 2020 fiscal year, the loaded mean hourly wage rate for O-4 was \$98. Accordingly, we estimate the total labor cost of reviewing an alternative request to be \$364 ($(2 \text{ hours of O-3 time} \times \$84) + (2 \text{ hours of O-4 time} \times \$98)$). Therefore, given the assumption that 75 percent of LNG fuel facilities will submit alternative requests, and given that there will be one submission annually, the average annual cost savings to the Federal Government of no longer meeting with facility representatives will be \$273 ($\$364 \text{ in cost saving} \times 1 \text{ facility} \times 0.75$), undiscounted.

Finally, we anticipate the Federal Government will save money by reviewing an ORA when compared to a WSA. The COI (Control Number 1625-0049) reports that reviewing a WSA and the corresponding hazard identification (HAZID)³¹ study requires 20 hours of enlisted staff time (10 hours of E-5 time and 10 hours of E-6 time) and 40 hours of officer time (20 hours of O-2 time and 20 hours of O-3 time), costing approximately \$4,240. Based on discussions with Coast Guard SMEs in Sector Jacksonville, reviewing an ORA and the corresponding HAZID study requires 38 hours of officer time (19 hours of O-3 time and 19 hours of O-4 time), costing about \$3,458.

³¹ A HAZID study is carried out to identify the main risks that can occur during LNG transfers from an LNG fuel facility to a receiving vessel.

Accordingly, we estimate the cost savings from reviewing an ORA instead of a WSA to be about \$782 (\$4,240 - \$3,458), undiscounted (See table 9 for detail).

Table 9: Government Cost Savings to Review an ORA as opposed to a WSA						
Employee Code	Loaded wage (a)	Hours		Cost		Cost Savings (f)=(e)-(d)
		Baseline (b)	Post-rule (c)	Baseline (d)=(a)×(b)	Post-rule (e)=(a)×(c)	
E-5	\$54	10	0	\$540	\$0	\$540
E-6	\$62	10	\$0	\$620	\$0	\$620
O-2	\$70	20	0	\$1,400	\$0	\$1,400
O-3	\$84	20	19	\$1,680	\$1,596	\$84
O-4	\$98	0	19	\$0	\$1,862	-\$1,862
Total		60	38	\$4,240	\$3,458	\$782

Therefore, given that only 25 percent of the LNG facilities currently conduct a WSA, instead of submitting an alternative request, we estimate the annualized cost savings to the government of reviewing an ORA instead of a WSA to be about \$196 (\$782 in cost savings × 1 facility × 0.25) using a 7-percent discount rate.

Table 10 presents the total cost savings to the Federal Government associated with eliminating the requirement to submit an alternative request and meet with the COTP to conduct an ORA in lieu of a WSA. We estimate the total discounted or present value cost savings to the Federal Government over a 10-year period of analysis to be about \$4,918, using a 7-percent discount rate. We estimate the annualized cost savings to the Federal Government to be about \$700, using a 7-percent discount rate.

Table 10: Total Government Cost Savings (\$2020)

[illegible]

Total Cost Savings

Table 11 summarizes the total cost savings of this final rule to industry and the Federal Government for the 10-year period of analysis. We estimate the total discounted or present value cost savings to industry and the Federal Government over a 10-year period of analysis to be about \$121,414 in 2020 dollars, using a 7-percent discount rate. We estimate the annualized cost savings to be about \$17,287 in 2020 dollars, using a 7-percent discount rate.

Table 11: Total Cost Savings to Industry and the Federal Government (\$2020)					
Year	Total Cost Savings to Industry	Total Cost Savings to Government	Total Undiscounted Cost Savings	Discounted Cost Savings	
				3%	7%
1	\$16,586	\$700	\$17,287	\$16,783	\$16,156
2	\$16,586	\$700	\$17,287	\$16,294	\$15,099
3	\$16,586	\$700	\$17,287	\$15,820	\$14,111
4	\$16,586	\$700	\$17,287	\$15,359	\$13,188
5	\$16,586	\$700	\$17,287	\$14,912	\$12,325
6	\$16,586	\$700	\$17,287	\$14,477	\$11,519
7	\$16,586	\$700	\$17,287	\$14,056	\$10,765
8	\$16,586	\$700	\$17,287	\$13,646	\$10,061
9	\$16,586	\$700	\$17,287	\$13,249	\$9,403
10	\$16,586	\$700	\$17,287	\$12,863	\$8,788
Total	\$165,863	\$7,003	\$172,866	\$147,458	\$121,414
Annualized				\$17,287	\$17,287
Totals may not sum due to independent rounding.					

Unquantified Benefits

This final rule has unquantified benefits to the regulated industry. This final rule updates the standards incorporated by reference to reflect the latest standards available to industry and requires all new LNG import/export facilities and waterfront facilities handling LHG to meet these standards. This requirement benefits the regulated industry as it eliminates the confusion that may arise from different standards existing in Coast Guard regulations that do not match current industry standards.

Cost

The requirements of this final rule do not add to industry costs compared to the no-action baseline. In particular, we determined that updating industry standards

incorporated by reference in the regulation is a no-cost change. Based on discussions with an industry consultant and SMEs in CG-OES, we determined that industry builds new, expanded, and modified LNG import/export facilities, LNG fuel facilities, and LHG facilities to the most current standards available at the time, and not to the outdated standards currently codified in part 127. In addition, the new industry standards do not apply to facilities constructed, expanded, or modified under a contract-awarded after the implementation date of the final rule. Hence, we do not anticipate owners and operators of new, expanded and modified facilities to incur any cost to meet the updated or new industry standards.

In addition, as part of the LOI, the Coast Guard is adding a new paragraph, § 127.007(a)(1). This paragraph requires LNG import/export facilities that complete a WSA to provide information to the Coast Guard on the nation of registry and the nationality or citizenship of officers and crew serving on board vessels transporting LNG that are reasonably anticipated to be servicing that facility. This requirement will only be applicable when a facility has to submit the LOI and WSA to the Coast Guard, and is not required every time a vessel comes to port. Because both the LOI and WSA are submitted years before the facility becomes operational, Coast Guard SMEs have determined that it is highly unlikely any specific details regarding vessels and their crew will be known at the time the facility submits the LOI and WSA. Table 12 summarizes the changes with no cost impacts.

Table 12: Summary of Changes to 33 CFR 127 with no Economic Impacts

Topic	CFR Section	Facility Type(s)	Changes in Requirements	Cost Impact
General Requirements				
Authority		All	<ul style="list-style-type: none"> Revised the authority citation to read as 33 U.S.C. 1504(j)(2), 46 U.S.C. 70011 and 70034; 46 U.S.C. Chapter 701; Department of Homeland Security Delegation No. 0170.1. Pub. L. 109-241, sec. 304(c)(2). 	<ul style="list-style-type: none"> No cost. This change is administrative in nature.
Applicability	§ 127.001	All	<ul style="list-style-type: none"> Amended paragraph (a) and (c) by removing the word “existing” because the term as it is currently defined in § 127.005 does not cover waterfront facilities handling LNG and LHG constructed after 1988 and 1996, respectively. 	<ul style="list-style-type: none"> No cost. The word “existing” is removed to avoid confusion as this final rule also applies to facilities handling LNG and LHG constructed after 1988 and 1996, respectively. This change is administrative in nature.
		Inactive LNG fuel and import/export facilities	<ul style="list-style-type: none"> Amended paragraph (c) by removing a reference to § 127.701, which contains security requirements for inactive LNG facilities. 	<ul style="list-style-type: none"> No cost. The Coast Guard has determined that the security requirements are now covered under 33 CFR part 105 and, thus, reference to § 127.701 in paragraph (c) is duplicative. Accordingly, removing the requirement does not have cost implications.
		All	<ul style="list-style-type: none"> Revised the applicability to read as “Waterfront facilities handling LNG and LHG constructed, expanded, or modified under a contract awarded after [INSERT 30 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER], are required to comply with the standards referenced in § 127.003. All other facilities, unless expanded or modified in accordance with this part, are required to meet previously applicable standards , but may request to apply a later edition of the standards in accordance with § 127.017.” 	<ul style="list-style-type: none"> No cost. This change is administrative in nature.
Incorporation by reference	§ 127.003	All	<ul style="list-style-type: none"> Updated standards that are currently listed to reflect the latest edition of the standards available and adding three new standards for incorporation by reference (see section VII.L of this preamble for a list of these standards). 	<ul style="list-style-type: none"> No cost. The Coast Guard has determined that all new LNG import/export facilities, LNG fuel facilities, and LHG facilities will meet the most recent industry standards in the absence of regulation.
Definitions	§ 127.005	All	<ul style="list-style-type: none"> Added new definitions for “LNG fuel facility” and modified the existing definitions for “Facility” and “Fire endurance rating.” 	<ul style="list-style-type: none"> No cost. This change is administrative in nature.
LOI and WSA	§ 127.007	New LNG import/export facilities and LHG Facilities	<ul style="list-style-type: none"> Amended paragraph (a), (b), and (e) by removing the word “existing” because the term as it is currently defined in § 127.005 does not cover waterfront facilities handling LNG and LHG constructed after 1988 and 1996, respectively. 	<ul style="list-style-type: none"> No cost. The word “existing” is removed to avoid confusion as this final rule also applies to facilities handling LNG and LHG constructed after 1988 and 1996, respectively. This change is

				administrative in nature
		New LNG Fuel Facilities	•Excluded LNG fuel facilities from this section because they will be addressed in a new § 127.008.	•No cost. This change is administrative in nature.
		New LNG import/export facilities	•Added new paragraph (a)(1) requiring an LNG import/export facility to provide information to the Coast Guard on the nation of registry of the vessels for, and the nationality or citizenship of officers and crew serving on board vessels transporting natural gas that are reasonably anticipated to be servicing that facility.	•No cost. This requirement will only be applicable when a facility has to submit the LOI and WSA to the Coast Guard, and is not required every time a vessel comes to port. Because both the LOI and WSA are submitted years before the facility becomes operational, Coast Guard SMEs have determined that it is highly unlikely any specific details regarding vessels and their crew will be known at the time the LOI and WSA are submitted.
			Added new paragraph (i) to clarify that an owner or operator intending to construct a new LNG fuel facility or modify any LNG fuel facility, or reactivate an inactive LNG fuel facility, may comply with § 127.008 in lieu of meeting the requirements in this section.	•No cost. This change is administrative in nature.
LOI and ORA	§ 127.008	New LNG Fuel Facilities	•Identified industry standards related to conducting risk assessments on LNG fuel facilities.	•No cost. The Coast Guard has determined that all new LNG fuel facilities and LHG facilities will meet the most recent industry standards in the absence of regulation.
Letter of Recommendation	§ 127.009	All New Facilities	•Updated text to refer to § 127.008.	•No cost. This change is administrative in nature, and it only clarifies that the letter for recommendation may be sent after the receipt of a WSA or ORA.
Inspection of Waterfront Facilities	§ 127.011	All New Facilities	•Replaced the word “shall” with “must.”	•No cost. This change is administrative in nature.
Appeals	§ 127.015	All New Facilities	•Updated the address of Coast Guard Headquarters. •Updated the name of the Coast Guard office reviewing appeals.	•No cost. This change is administrative in nature. •
Alternatives	§ 127.017	All New Facilities	•Added reference to § 127.003.	•No cost. This change is administrative in nature
Operations Manual and Emergency Manual Procedures for Examination	§ 127.019	All New Facilities	•Replaced the word “shall” with “must.”	•No cost. This change is administrative in nature.
			•Amended paragraph (b) by removing the word “existing” to clarify that all waterfront facilities handling LNG and LHG, regardless of when they were constructed, must submit the information required in § 127.019.	•No cost. This change is administrative in its nature.
LNG - Design and Construction				
Design and	§ 127.101	New LNG	•Updated references to NFPA 59A chapters and sections to	•No cost. This change is administrative in

Construction General		Facilities	reflect the numbering in the most recent edition.	nature.
Electrical Power System	§ 127.107	New LNG Facilities	•Added references to § 127.003, “Incorporation by reference.”	•No cost. The Coast Guard has determined that all new LNG and LHG facilities will meet the most recent industry standards in the absence of regulation.
			•Removed the words, “National Electrical Code.”	•No cost. This change is administrative in nature.
LNG – Equipment				
Sensing and Alarm Systems	§ 127.201	New LNG Facilities	•Added references to § 127.003, “Incorporation by reference.”	•No cost. The Coast Guard has determined that all new LNG and LHG facilities will meet the most recent industry standards in the absence of regulation.
			•Updated references to NFPA 59A sections to reflect the numbering in the most recent edition.	•No cost. This change is administrative in nature.
LNG – Operations				
Persons in Charge of Shoreside Transfer Operations: Qualifications and Certification.	§ 127.301	New LNG Facilities	•Replaced the word “shall” with “must.”	•No cost. This change is administrative in nature.
Operations Manual and Emergency Manual Use	§ 127.309	New LNG Facilities	•Replaced the word “shall” with “must.”	•No cost. This change is administrative in nature.
Motor Vehicles	§ 127.311	New LNG Facilities	•Replaced the word “shall” with “must.”	•No cost. This change is administrative in nature.
Bulk Storage	§ 127.313	New LNG Facilities	•Replaced the word “shall” with “must.”	•No cost. This change is administrative in nature.
			•Added references to § 127.003, “Incorporation by reference.	•No cost. The Coast Guard has determined that all new LNG and LHG facilities will meet the most recent industry standards in the absence of regulation.
Primary Transfer Inspection	§ 127.315	New LNG Facilities	•Replaced the word “shall” with “must.”	•No cost. This change is administrative in nature.
Declaration of Inspection	§ 127.317	New LNG Facilities	•Replaced the word “shall” with “must.”	•No cost. This change is administrative in nature.
LNG Transfer	§ 127.319	New LNG	•Replaced the word “shall” with “must.”	•No cost. This change is administrative in

		Facilities		nature.
Release of LNG	§ 127.321	New LNG Facilities	• Replaced the word “shall” with “must.”	• No cost. This change is administrative in nature.
LNG – Maintenance				
Maintenance: General	§ 127.401	New LNG Facilities	• Replaced the word “shall” with “must.”	• No cost. This change is administrative in nature.
Inspections	§ 127.403	New LNG Facilities	• Replaced the word “shall” with “must.”	• No cost. This change is administrative in nature.
Repairs	§ 127.405	New LNG Facilities	• Replaced the word “shall” with “must.”	• No cost. This change is administrative in nature.
			• Updated references to NFPA 59A sections to reflect the numbering in the most recent edition. • Added references to § 127.003, “Incorporation by reference.”	• No cost. The Coast Guard has determined that all new LNG and LHG facilities will meet the most recent industry standards in the absence of regulation.
Testing	§ 127.407	New LNG Facilities	• Replaced the word “shall” with “must.”	• No cost. This change is administrative in nature.
Records	§ 127.409	New LNG Facilities	• Replaced the word “shall” with “must.”	• No cost. This change is administrative in nature.
LNG - Fire Equipment				
Portable Fire Extinguishers	§ 127.603	New LNG Facilities	• Added references to § 127.003, “Incorporation by reference.”	• No cost. The Coast Guard has determined that all new LNG and LHG facilities will meet the most recent industry standards in the absence of regulation.
			• Updated references to NFPA 59A sections to reflect the numbering in the most recent edition.	• No cost. This change is administrative in nature.
International Shore Connection	§ 127.611	New LNG Facilities	• Added references to § 127.003, “Incorporation by reference.” • Updated the referenced version of ASTM F 1121-87.	• No cost. The Coast Guard has determined that all new LNG and LHG facilities will meet the most recent industry standards in the absence of regulation.
Smoking	§ 127.613	New LNG Facilities	• Replaced the word “shall” with “must.”	• No cost. This change is administrative in nature.
Fires	§ 127.615	New LNG Facilities	• Replaced the word “shall” with “must.”	• No cost. These changes are administrative in nature.
Hotwork	§ 127.617	New LNG Facilities	• Replaced the word “shall” with “must.”	• No cost. These changes are administrative in nature.
LNG — Security				
Security on Existing Facilities	§ 127.701	New LNG Facilities	• Removed the section, as the requirements in this section are no longer needed because facilities regulated under part 127 are required to comply with the maritime security facilities regulations contained in 33 CFR part 105.	• No cost. These changes are administrative in nature

Access to the Marine Transfer Area for LNG	§ 127.703	New LNG Facilities	<ul style="list-style-type: none"> Removed the section, as the requirements in this section are no longer needed because facilities regulated under part 127 are required to comply with the maritime security facilities regulations contained in 33 CFR part 105. 	<ul style="list-style-type: none"> No cost. These changes are administrative in nature.
Security Systems	§ 127.705	New LNG Facilities	<ul style="list-style-type: none"> Removed the section, as the requirements in this section are no longer needed because facilities regulated under Part 127 are required to comply with the maritime security facilities regulations contained in 33 CFR part 105. 	<ul style="list-style-type: none"> No cost. These changes are administrative in nature.
Security Personnel	§ 127.707	New LNG Facilities	<ul style="list-style-type: none"> Removed the section, as the requirements in this section are no longer needed because facilities regulated under Part 127 are required to comply with the maritime security facilities regulations contained in 33 CFR part 105. 	<ul style="list-style-type: none"> No cost. These changes are administrative in nature.
Protective Enclosures	§ 127.709	New LNG Facilities	<ul style="list-style-type: none"> Removed the section, as the requirements in this section are no longer needed because facilities regulated under part 127 are required to comply with the maritime security facilities regulations contained in 33 CFR part 105. 	<ul style="list-style-type: none"> No cost. These changes are administrative in nature.
Communications	§ 127.711	New LNG Facilities	<ul style="list-style-type: none"> Removed the section, as the requirements in this section are no longer needed because facilities regulated under part 127 are required to comply with the maritime security facilities regulations contained in 33 CFR part 105. 	<ul style="list-style-type: none"> No cost. These changes are administrative in nature.
LHG - Design and Construction				
Piping Systems	§ 127.1101	New LHG Facilities	<ul style="list-style-type: none"> Updated the referenced version of ASME B31.3. Added references to § 127.003, “Incorporation by reference.” 	<ul style="list-style-type: none"> No cost. The Coast Guard has determined that all new LNG and LHG facilities will meet the most recent industry standards in the absence of regulation.
Transfer Hoses and Loading Arms	§ 127.1102	New LHG Facilities	<ul style="list-style-type: none"> Updated the referenced version of ASME B16.5 Added references to § 127.003, “Incorporation by reference.” 	<ul style="list-style-type: none"> No cost. The Coast Guard has determined that all new LNG and LHG facilities will meet the most recent industry standards in the absence of regulation.
Piers and wharves	§ 127.1103	New LHG Facilities	<ul style="list-style-type: none"> Removed the word “existing” from this section to clarify that the requirements in this section apply to new constructions in the marine transfer area of all LHG facilities, and not just to “existing” facilities. 	<ul style="list-style-type: none"> No cost. These changes are administrative in nature.
Layout and spacing of marine transfer area for LHG	§ 127.1105	New LHG Facilities	<ul style="list-style-type: none"> Removed the word “existing” from this section to clarify that the requirements in this section apply to new constructions in the marine transfer area of all LHG facilities, and not just to “existing” facilities. 	<ul style="list-style-type: none"> No cost. These changes are administrative in nature.
Electrical Systems	§ 127.1107	New LHG Facilities	<ul style="list-style-type: none"> Added references to § 127.003, “Incorporation by reference.” 	<ul style="list-style-type: none"> No cost. The Coast Guard has determined that all new LNG and LHG facilities will meet the most recent industry standards in the absence of regulation.
LHG — Equipment				

Gas Detection	§ 127.1203	New LHG Facilities	<ul style="list-style-type: none"> Updated the referenced version of IEC 60079-29-1. Added references to § 127.003, “Incorporation by reference.” 	<ul style="list-style-type: none"> No cost. The Coast Guard has determined that all new LNG and LHG facilities will meet the most recent industry standards in the absence of regulation.
Warning Alarms	§ 127.1207	New LHG Facilities	<ul style="list-style-type: none"> Replaced the word “shall” with “must.” 	<ul style="list-style-type: none"> No cost. These changes are administrative in nature.
LHG — Operations				
Persons in Charge of Transfers for the Facility: Qualifications and Certification.	§ 127.1301	New LHG Facilities	<ul style="list-style-type: none"> Replaced the word “shall” with “must.” 	<ul style="list-style-type: none"> No cost. This change is administrative in nature.
Training	§ 127.1302	New LHG Facilities	<ul style="list-style-type: none"> Replaced the word “shall” with “must.” 	<ul style="list-style-type: none"> No cost. This change is administrative in nature.
Operations Manual and Emergency Manual Use	§ 127.1309	New LHG Facilities	<ul style="list-style-type: none"> Replaced the word “shall” with “must.” 	<ul style="list-style-type: none"> No cost. This change is administrative in nature.
Motor Vehicles	§ 127.1311	New LHG Facilities	<ul style="list-style-type: none"> Replaced the word “shall” with “must.” 	<ul style="list-style-type: none"> No cost. This change is administrative in nature.
Storage of Hazardous Materials	§ 127.1313	New LHG Facilities	<ul style="list-style-type: none"> Replaced the word “shall” with “must.” Added references to § 127.003, “Incorporation by reference.” 	<ul style="list-style-type: none"> No cost. This change is administrative in nature.
Preliminary Transfer Inspection	§ 127.1315	New LHG Facilities	<ul style="list-style-type: none"> Replaced the word “shall” with “must.” 	<ul style="list-style-type: none"> No cost. This change is administrative in nature.
Declaration of Inspection	§ 127.1317	New LHG Facilities	<ul style="list-style-type: none"> Replaced the word “shall” with “must.” 	<ul style="list-style-type: none"> No cost. This change is administrative in nature.
Transfer of LHG	§ 127.1319	New LHG Facilities	<ul style="list-style-type: none"> Replaced the word “shall” with “must.” 	<ul style="list-style-type: none"> No cost. This change is administrative in nature.
Release of LHG	§ 127.1321	New LHG Facilities	<ul style="list-style-type: none"> Replaced the word “shall” with “must.” 	<ul style="list-style-type: none"> No cost. This change is administrative in nature.
Access to Marine Transfer Area for LHG	§ 127.1325	New LHG Facilities	<ul style="list-style-type: none"> Replaced the word “shall” with “must.” 	<ul style="list-style-type: none"> No cost. This change is administrative in nature.
LHG — Maintenance				
General	§ 127.1401	New LHG Facilities	<ul style="list-style-type: none"> Replaced the word “shall” with “must.” 	<ul style="list-style-type: none"> No cost. This change is administrative in nature.
Inspections	§ 127.1403	New LHG Facilities	<ul style="list-style-type: none"> Replaced the word “shall” with “must.” 	<ul style="list-style-type: none"> No cost. This change is administrative in nature.
Repairs	§ 127.1405	New LHG Facilities	<ul style="list-style-type: none"> Replaced the word “shall” with “must.” Added references to § 127.003, “Incorporation by reference.” 	<ul style="list-style-type: none"> No cost. This change is administrative in nature. No cost. The Coast Guard has

				determined that all new LNG and LHG facilities will meet the most recent industry standards in the absence of regulation.
Tests	§ 127.1407	New LHG Facilities	• Replaced the word “shall” with “must.”	• No cost. This change is administrative in nature.
Records	§ 127.1409	New LHG Facilities	• Replaced the word “shall” with “must.”	• No cost. This change is administrative in nature.
LHG - Fire Equipment				
General	§ 127.1501	New LHG facilities	• Amended this section by removing the word “existing” to clarify that § 127.1501 applies to new LHG facilities, not just “existing” LHG facilities.	• No cost. This change is administrative in nature.
Portable Fire Extinguishers	§ 127.1503	New LHG Facilities	• Added references to § 127.003, “Incorporation by reference.”	• No cost. This change is administrative in nature.
International Shore Connection	§ 127.1511	New LHG Facilities	• Added references to § 127.003, “Incorporation by reference.”	• No cost. This change is administrative in nature.
			• Updated the referenced version of ASTM F 1121-87.	• No cost. The Coast Guard has determined that all new LNG and LHG facilities will meet the most recent industry standards in the absence of regulation.
LHG - Fire Protection				
Smoking	§ 127.1601	New LHG Facilities	• Replaces the word “shall” with “must.”	• No cost. This change is administrative in nature.
Hotwork	§ 127.1603	New LHG Facilities	• Replaces the word “shall” with “must.”	• No cost. This change is administrative in nature.
Other Sources of Ignition	§ 127.1605	New LHG Facilities	• Replaces the word “shall” with “must.”	• No cost. This change is administrative in nature.

Alternatives

While developing this final rule, the Coast Guard considered three alternatives to the rule. We present a summary of the alternatives below and show their corresponding impact and cost savings in table 13.

Alternative 1: No Action Alternative

Under this alternative, the Coast Guard would accept the status quo and review each proposal for an LNG fuel facility on a case-by-case, equivalency basis. We rejected this alternative because the Coast Guard believes this approach is inefficient in an environment of growing interest in LNG fuel because it does not respond to the needs of the U.S. maritime industry. This alternative would not impose any additional costs on industry, nor will this option result in cost savings for the affected facilities or the Coast Guard.

Alternative 2: Submit an ORA, but do not update the IBR Standards Alternative

Under this alternative, the Coast Guard would allow new LNG fuel facilities to submit an ORA instead of a WSA without submitting an alternative request and meeting with the COTP. However, under this alternative, the Coast Guard would not update the existing IBR standards. This alternative would not impose any additional costs to industry and would result in cost savings. We rejected this alternative because the regulations would continue to reference outdated standards instead of reflecting industry best practices and the best technologies available to industry.

Alternative 3: Continue to meet with the COTP when submitting the ORA

Under this alternative, the Coast Guard would allow new LNG fuel facilities to submit an ORA instead of a WSA, as long as the facility representatives continue to meet with the COTP and get the ORA approved. Although this alternative would be less burdensome compared to the baseline, the Coast Guard rejected this alternative because it would require industry representatives to continue meeting with the COTP in person to

discuss the ORA.

One commenter expressed support for this alternative, noting that it would be beneficial if owners and operators continue to meet with the COTP before submitting an ORA, as this would reduce the amount of work facility owners would have to do to get the LNG fuel facility approved. Another commenter added that the meeting provides the COTP with an opportunity to notice any potential safety and security risks to the facility. As stated before, the Coast Guard expects owners and operators to continue meeting with the COTP, but has determined that the preliminary requirement for certain facilities to obtain the COTP's approval prior to beginning the ORA should be eliminated.

Table 13: Comparison of Regulatory Alternatives		
Alternative	Annualized Cost Savings	Impact of the Alternative
Final Rule	\$17,287	Codifies industry standards, establishes national baseline safety standards and alleviates discrepancies and unnecessary duplication between regulatory standards and industry best practices. In addition, it reduces the burden to industry by allowing new LNG fuel facilities to submit an ORA instead of a WSA without first having to submit an alternative request and meet with the COTP to obtain approval.
Alternative 1: <i>No Action</i>	\$0	This alternative would not codify minimum safety standards, respond to industry needs, or reduce industry burden. It would not impose any additional costs.
Alternative 2: <i>Submit an ORA, but do not update the IBR Standards Alternative</i>	\$17,287	This alternative would reduce the burden to industry by allowing new LNG fuel facilities to submit an ORA instead of a WSA without first having to submit an alternative request and meet with the COTP to obtain approval. However, it would not update IBR standards. This alternative would not impose any additional costs to industry.
Alternative 3: <i>Continue to Meet with the COTP when submitting an ORA</i>	\$14,018 ³²	This alternative would codify industry standards establishing national baseline safety standards. In addition, it would reduce the burden to industry by allowing new LNG fuel facilities to submit an ORA instead of a WSA without first having to submit an alternative request. However, this alternative would still require meeting with the COTP, making it more burdensome compared to the final rule. This

³² This is cost savings under the preferred option (\$17,287) minus the cost of meeting to industry, which equals \$1,327 when driving and \$1,669 when flying, for a total of \$2,996; and the cost of meeting to Government, which is \$273. $\$17,287 - (\$2,996 + 273) = \$14,018$.

		alternative would not impose any additional costs to industry, but has less cost savings compared to Alternative 2.
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B. Small Entities

Under the Regulatory Flexibility Act, 5 U.S.C. 601–612, we have considered whether this rule would have a significant economic impact on a substantial number of small entities. The term “small entities” comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000. There were no public comments pertaining to the analysis on small entities.

This rule applies to new LNG fuel facilities, LNG import and export facilities, and new LHG facilities. A threshold analysis of the small entity impacts follows.

LNG fuel facilities

The Coast Guard has determined this rule will not generate costs on existing LNG fuel facilities but will generate cost savings to one new facility per year. In particular, we estimate that this rule will generate a net cost savings of about \$16,586, using 7-percent discount rate, to one new LNG fuel facility per year, compared to the \$16,153 net cost savings calculated in the proposed rule. To estimate the potential impact on small entities, we compare the \$16,586 in net cost savings with the annual revenue data of the new LNG fuel facility impacted by this rule. The Coast Guard determined that an entity would have to have an annual revenue of \$1,658,600 or less for this rule to have an impact greater than 1 percent of revenue.

Using the Small Business Administration’s (SBA) size standards table,³³ we determined that two of the four LNG fuel facilities are small entities. These two small entities have a North American Industry Classification System (NAICS) code of 213112

³³ Readers can view industry size standards at <https://www.sba.gov/document/support--table-size-standards> (accessed July 11, 2019).

and 541990. Based on SBA's size standards table, the size standard for these codes is \$38.5 million and \$15 million, respectively. Publicly available data suggests that the annual revenue of the two facilities is about \$2.4 million and about \$3.8 million, respectively. Thus, conservatively assuming the new LNG fuel facility will have annual revenues equivalent to the smallest entity in the industry, we estimate that the economic impact, in the form of cost savings, of this rule will be approximately 0.69 percent of revenue ($(\$16,586 \div \$2,400,000) \times 100 = 0.6910$)), compared to the 0.673 percent of revenue calculated in the proposed rule.

No not-for-profit organizations are involved with LNG fuel facilities. In addition, this rule will not have an adverse or beneficial impact on small government entities.

LNG import/export facilities

The Coast Guard has determined that this rule will have no cost or cost savings impact on existing and new LNG import/export facilities. Moreover, no not-for-profit organizations are involved with LNG import/export facilities. This rule will not have an adverse or beneficial impact on small government entities.

LHG facilities

The Coast Guard has determined that this rule will have no cost or cost savings impact on existing and new LHG facilities. Moreover, no not-for-profit organizations are involved with LHG facilities. This rule will not have an adverse or beneficial impact on small government entities. Therefore, the Coast Guard certifies under 5 U.S.C. 605(b) that this rule will not have a significant economic impact on a substantial number of small entities.

C. Assistance for Small Entities

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996, Public Law 104-121, we offer to assist small entities in understanding this rule so that they can better evaluate its effects on them and participate in the rulemaking. The

Coast Guard will not retaliate against small entities that question or complain about this rule or any policy or action of the Coast Guard.

Small businesses may send comments on the actions of Federal employees who enforce, or otherwise determine compliance with, Federal regulations to the Small Business and Agriculture Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The Ombudsman evaluates these actions annually and rates each agency's responsiveness to small business. If you wish to comment on actions by employees of the Coast Guard, call 1-888-REG-FAIR (1-888-734-3247).

D. Collection of Information

This rule calls for a revised collection of information under the Paperwork Reduction Act of 1995, 44 U.S.C. 3501–3520. As defined in 5 CFR 1320.3(c), “collection of information” comprises reporting, recordkeeping, monitoring, posting, labeling, and other similar actions. The title and description of the information collection, a description of those who must collect the information, and an estimate of the total annual burden follow. The estimate covers the time for reviewing instructions, searching existing sources of data, gathering and maintaining the data needed, and completing and reviewing the collection.

Title: Waterfront Facilities Handling Liquefied Natural Gas and Liquefied Hazardous Gas

OMB Control Number: 1625-0049

Summary of the Collection of Information: The Coast Guard currently collects information from waterfront facilities handling LNG and LHG under 33 CFR part 127. The current information collection request contains requirements in the following sections: LOIs, WSAs, the submission of appeals to the Coast Guard, the submission of alternatives to the Coast Guard, Operations Manuals, Emergency Manuals, Certification of the Person in Charge, Declaration of Inspection, and Records of Maintenance. In

addition, this rule will add a new collection of information for ORA submissions for new LNG fuel facilities.

Need for Information: The Coast Guard has regulations that provide safety standards for the design and construction, equipment, operations, maintenance, personnel training, and fire protection at waterfront facilities handling LNG. These regulations help reduce the probability that an accident could occur and help reduce the damage and injury to persons and property should an accident occur.

Use of Information: The Coast Guard currently uses the information collected for the following purposes: (1) to determine the suitability of a waterfront facility handling LNG to safely conduct LNG fuel transfer operations; (2) to properly evaluate alternative procedures to ensure they provide at least the same degree of safety as the regulations; (3) to ensure that safe operating procedures and an effective training program are set up by the waterfront facility operator; (4) to ensure that effective procedures have been set up by the waterfront facility operator to respond to emergencies; ensure the person in charge of an LNG or LHG transfer is properly qualified; and (5) to verify that persons in charge are following proper transfer procedures.

Description of the Respondents: The respondents are LNG import/export facilities, LNG fuel facilities, and LHG facilities.

Number of Respondents: This rule does not change the number of respondents. However, we anticipate the number of waterfront facilities handling LNG will increase by three annually (two new LNG import/export facilities and one LNG fuel facility). We also anticipate three new LHG facilities will replace three retiring facilities annually.

Frequency of Response: The number of responses will vary by requirement. This rule does not change the frequency of responses for existing requirements. However, this rule introduces a new ORA requirement, which is a one-time requirement for a LNG fuel facility.

Burden of Response: The burden per response for each regulatory requirement varies. For the new ORA requirement, we estimate it will take 289 hours to complete. Submitting an ORA in place of a WSA (500 hours per response) is a savings of 211 hours per response.

Estimate of Total Annual Burden: To account for the change in the facility population and the new ORA option, we estimate that the burden will increase by 1,956 hours.

For a new LNG import/export facility, this rule will require providing information to the Coast Guard at the time the WSA is submitted on the nation of registry for, and the nationality or citizenship of officers and crew serving on board vessels transporting natural gas that are reasonably anticipated to be servicing that facility. The Coast Guard does not expect the facility to have specific details regarding vessels and their crew when it submits the LOI and WSA to the Coast Guard, as these submissions happen several years before the facility begins operations. The Paperwork Reduction Act will not apply to this requirement as the Coast Guard anticipates only two new LNG import/export facilities per year will be subject to this requirement.³⁴

As required by 44 U.S.C. 3507(d), we will submit a copy of this rule to OMB for its review of the collection of information.

You are not required to respond to a collection of information unless it displays a currently valid OMB control number. OMB has not yet completed its review of this collection. Therefore, we are not making § 127.008 effective until OMB completes action on our information collection request, at which time we will publish a **Federal Register** notice describing OMB's action and, if OMB grants approval, notifying you when § 127.008 takes effect.

³⁴ The Paperwork Reduction Act applies to collections of information using identical questions posed to, or reporting or recordkeeping requirements imposed on, 10 or more persons per year. See 5 CFR 1320.3(c), and Office of Management and Budget, *Memorandum for the Heads of Executive Departments and Agencies and Independent Regulatory Agencies*, dated April 7, 2010, at p. 2.

E. Federalism

A rule has implications for federalism under Executive Order 13132 (Federalism) if it has a substantial direct effect on States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government. We have analyzed this rule under Executive Order 13132 and have determined that it is consistent with the fundamental federalism principles and preemption requirements described in Executive Order 13132. Our analysis follows.

This rule, with respect to the LOI, WSA, and ORA submission requirements and COTP approval (33 CFR 127.007, 127.008, 127.009, 127.015, and 127.017), does not conflict with State interests. They are procedural requirements for the Coast Guard's own safety and security risk analysis, approval, and appeal process of a new, modified, or reactivated facility and its attendant LNG transfer operations. As it relates to other requirements imposed by individual States, or their political subdivisions, the submission and approval process for the construction of a new structure will be unaffected by this rule.

Moreover, with respect to LNG transfer operations that may be included in the LOI, WSA, and ORA submissions, pursuant to 46 U.S.C. 70011(b)(1), Congress has expressly authorized the establishment of "procedures, measures and standards for the handling, loading, unloading, storage, stowage and movement on a structure of explosives or other dangerous articles and substances, including oil or hazardous material." The Coast Guard affirmatively preempts any State rules related to these procedures, measures, and standards. *See* the Supreme Court's decision in *United States v. Locke*, 529 U.S. 89, 109-110 (2000).

Regarding the updates of technical standards referenced in 33 CFR part 127, it is Congress's express intent that, with respect to waterfront structures, States retain the power to regulate to higher standards than those promulgated by the Coast Guard. As

stated in 46 U.S.C. 70011(c), “State Law. – Nothing in this section, with respect to structures, prohibits a State or political subdivision thereof from prescribing higher safety equipment or safety standards than those that may be prescribed by regulations under this section.” Thus, Congress has made clear that the Federal standards promulgated under this section establish the uniform minimum standards of the United States, but individual States are entitled to impose higher safety equipment requirements or higher safety standards for structures within their jurisdiction.

Therefore, other than with respect to structures as noted above, because the States may not regulate within these categories where such regulation conflicts with Federal requirements, this rule is consistent with the fundamental federalism principles and preemption requirements described in Executive Order 13132.

F. Unfunded Mandates

The Unfunded Mandates Reform Act of 1995, 2 U.S.C. 1531–1538, requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of \$100,000,000 (adjusted for inflation) or more in any one year. Although this rule will not result in such an expenditure, we do discuss the effects of this rule elsewhere in this preamble.

G. Taking of Private Property

This rule will not cause a taking of private property or otherwise have taking implications under Executive Order 12630 (Governmental Actions and Interference with Constitutionally Protected Property Rights).

H. Civil Justice Reform

This rule meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, (Civil Justice Reform), to minimize litigation, eliminate ambiguity, and reduce burden.

I Protection of Children

We have analyzed this rule under Executive Order 13045 (Protection of Children from Environmental Health Risks and Safety Risks). This rule is not an economically significant rule and will not create an environmental risk to health or risk to safety that might disproportionately affect children.

J. Indian Tribal Governments

This rule does not have tribal implications under Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments), because it will not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

K. Energy Effects

We have analyzed this rule under Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use). We have determined that it is not a “significant energy action” under that order because it is not a “significant regulatory action” under Executive Order 12866 and is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

L. Technical Standards and Incorporation by Reference

The National Technology Transfer and Advancement Act, codified as a note to 15 U.S.C. 272, directs agencies to use voluntary consensus standards in their regulatory activities unless the agency provides Congress, through OMB, with an explanation of why using these standards would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., specifications of materials, performance, design, or operation; test methods; sampling procedures; and related management systems practices) that are developed or adopted by voluntary consensus standards bodies.

This rule incorporates by reference the following new voluntary consensus standards:

- Det Norske Veritas (DNV), DNVGL-RP-G105, Recommended Practice, Development and operation of liquefied natural gas bunkering facilities, October 2015 Edition. This standard provides guidance to the industry on the developmental, organizational, technical, functional, and operational issues of LNG bunkering (fueling) facilities in order to ensure global compatibility and secure a high level of safety, integrity, and reliability. The DNVGL-RP-G105 standard was selected because it aligns with the International Organization for Standardization (ISO), (“ISO/TS 18683”), discussed below. Both of these standards provide guidance to industry on conducting risk assessments that are focused on providing LNG as a marine fuel (bunkering operations).
- International Organization for Standardization (ISO), (“ISO/TS 18683”), Guidelines for systems and installations for supply of LNG as fuel to ships, First Edition, January 15, 2015. This standard gives guidance on the minimum requirements for the design and operation of the LNG bunkering (fueling) facility, including the interface between the LNG supply facilities and receiving ships.
- ISO 28460:2010(E), (“ISO 28460”), Petroleum and natural gas industries – Installation and equipment for liquefied natural gas – Ship-to-shore interface and port operations, First edition, December 15, 2010. This standard specifies the requirements for ship, terminal, and port service providers to ensure the safe transit of an LNG carrier through the port area and the safe and efficient transfer of its cargo.

This rule incorporates by reference the following updated voluntary consensus standards:

- American Petroleum Institute (API), API Recommended Practice 2003, (“API RP 2003”) Protection Against Ignitions Arising Out of Static, Lightning and Stray Currents, Eighth Edition, September 2015. This standard presents the current state of knowledge and technology in the fields of static electricity and stray currents applicable to the prevention of hydrocarbon ignition in the petroleum industry, based on both scientific research and practical experience.
- The American Society of Mechanical Engineers (ASME), ASME B16.5-2020, Pipe Flanges and Flanged Fittings, NPS 1/2 through NPS 24 Metric/Inch Standard, Issued January 29, 2021. This standard covers pressure-temperature ratings, materials, dimensions, tolerances, marking, testing, and methods of designating openings for pipe flanges and flanged fittings.
- ASME B31.3-2020, Process Piping, ASME Code for Pressure Piping, B31, Issued June 18, 2021. This standard contains requirements for piping typically found in petroleum refineries; chemical, pharmaceutical, textile, paper, semiconductor, and cryogenic plants; and related processing plants and terminals. It covers materials and components, design, fabrication, assembly, erection, examination, inspection, and testing of piping.
- ASTM International, ASTM E119-20, Standard Test Methods for Fire Tests of Building Construction and Materials, approved May 1, 2020. This standard provides methods of fire tests applicable to assemblies of masonry units and to composite assemblies of structural materials for buildings, including bearing and other walls, partitions, columns, girders, beams, slabs, and composite slab and beam assemblies for floors and roofs. This standard also applies to other assemblies and structural units that constitute permanent integral parts of a finished building.

- ASTM F 1121-87 (Reapproved 2019), Standard Specification for International Shore Connections for Marine Fire Applications, approved December 1, 2019, published January 2020. This standard covers the specifications for the design and manufacture of international shore connections used with marine firefighting systems during an emergency when a stricken ship has a system failure.
- International Electrotechnical Commission (IEC), IEC 60079-29-1, Explosive atmospheres – Part 29-1: Gas detectors – Performance requirements of detectors for flammable gases, Edition 2.0, July 2016. This standard specifies general requirements for construction, testing, and performance, and describes the test methods that apply to portable, transportable, and fixed apparatus for the detection and measurement of flammable gas or vapor concentrations with air.
- National Fire Protection Association (NFPA), NFPA 10, Standard for Portable Fire Extinguishers, 2018 Edition, effective August 21, 2017. This standard applies to the selection, installation, inspection, maintenance, recharging, and testing of portable extinguishing equipment and Class D extinguishing agents.
- NFPA 30, Flammable and Combustible Liquids Code, 2018 Edition, effective September 6, 2017. This standard applies to the storage, handling, and use of flammable and combustible liquids, including waste liquids.
- NFPA 51B, Standard for Fire Prevention During Welding, Cutting, and Other Hot Work, 2019 Edition, effective July 15, 2018. This standard covers provisions to prevent injury, loss of life, and loss of property from fire or explosion as a result of hot work.
- NFPA 59A, Standard for the Production, Storage, and Handling of Liquefied Natural Gas (LNG), 2019 Edition, effective November 25, 2018. This

standard provides minimum fire protection, safety, and related requirements for the location, design, construction, security, operation, and maintenance of LNG plants.

- NFPA 70, National Electrical Code, 2020 Edition, effective August 25, 2019.

The provisions of this standard apply to the design, modification, construction, inspection, maintenance, and testing of electrical systems, installations, and equipment.

The list of these standards and the locations where these standards are available is found in § 127.003.

M. Environment

We have analyzed this rule under Department of Homeland Security Management Directive 023-01, Rev. 1, associated implementing instructions, and Environmental Planning COMDTINST 5090.1 (series), which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (42 U.S.C. 4321–4370f), and have determined that this action is one of a category of actions that does not individually or cumulatively have a significant effect on the human environment. A final Record of Environmental Consideration supporting this determination is available in the docket. For instructions on locating the docket, see the ADDRESSES section of this preamble. This rule is categorically excluded under paragraphs A3 and L54 in Appendix A, Table 1 of DHS Directive Instruction Manual 023–01–001–01, Rev. 1.³⁵ Paragraph A3 pertains to promulgation of rules and other guidance documents that interpret or amend existing regulations without changing its environmental effect. Paragraph L54 pertains to regulations that are editorial or procedural. This rule promotes the Coast Guard’s maritime safety and Ports and waterway security missions.

³⁵ https://www.dhs.gov/sites/default/files/publications/DHS_Instruction%20Manual%20023-01-001-01%20Rev%2001_508%20Admin%20Rev.pdf.

List of Subjects in 33 CFR Part 127

Fire prevention, Harbors, Hazardous substances, Incorporation by reference,
Natural gas, Reporting and recordkeeping requirements, Security measures

For the reasons discussed in the preamble, the Coast Guard amends 33 CFR part 127 as follows:

PART 127 -- WATERFRONT FACILITIES HANDLING LIQUEFIED NATURAL GAS AND LIQUEFIED HAZARDOUS GAS

1. The authority citation for part 127 is revised to read as follows:

Authority: 33 U.S.C. 1504(j)(2); 46 U.S.C. 70011 and 70034; 46 U.S.C. Chapter 701; DHS Delegation No. 00170.1, Revision No. 01.2, paragraph (II)(92)(a).

2. Amend § 127.001 by:

- a. In paragraph (a), removing the word “existing”;
- b. Revising paragraph (c); and
- c. Adding paragraph (f).

The revision and addition read as follows:

§ 127.001 Applicability.

* * * * *

(c) Sections 127.007(b), (c), and (d), and 127.019(b) of subpart A of this part apply to the marine transfer area for LNG of each inactive facility.

* * * * *

(f) Waterfront facilities handling LNG and LHG constructed, expanded, or modified under a contract awarded after [INSERT 30 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER], are required to comply with the applicable standards referenced in § 127.003. All other facilities, unless expanded or modified in accordance with this part, are required to meet previously applicable standards but may request to apply a later edition of the standards in accordance with § 127.017.

3. Revise § 127.003 to read as follows:

§ 127.003 Incorporation by reference.

Certain material is incorporated by reference into this part with the approval of the Director of the **Federal Register** under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the Coast Guard must publish a document in the **Federal Register** and the material must be available to the public. All approved material is available for inspection at the U.S. Coast Guard, Office of Operating and Environmental Standards (CG-OES), 2703 Martin Luther King Jr. Avenue SE, STOP 7509, Washington, DC 20593-7509, 202-372-1410, and is available from the sources listed in the following paragraphs. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fr.inspection@nara.gov or go to <https://www.archives.gov/federal-register/cfr/ibr-locations.html>. (See § 127.017 for alternative compliance methods.)

(a) American Petroleum Institute (API), 200 Massachusetts Avenue NW, Suite 1100, Washington, DC 20001-5571, 202-682-8000, <http://www.api.org>.

(1) API Recommended Practice 2003 (“API RP 2003”), Protection Against Ignitions Arising Out of Static, Lightning and Stray Currents, Eighth Edition, September 2015, for § 127.1101(h).

(2) [Reserved]

(b) The American Society of Mechanical Engineers (ASME), Two Park Avenue, New York, NY 10016–5990, 800-843-2763, <https://www.asme.org>.

(1) ASME B16.5-2020, Pipe Flanges and Flanged Fittings, NPS 1/2 Through NPS 24 Metric/Inch Standard, Issued January 29, 2021, for § 127.1102(a).

(2) ASME B31.3-2020, Process Piping, ASME Code for Pressure Piping, B31, Issued June 18, 2021, for § 127.1101(a).

(c) ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West

Conshohocken, PA, 19428–2959, 610-832-9500, <https://www.astm.org>.

(1) ASTM E119-20, Standard Test Methods for Fire Tests of Building Construction and Materials, approved May 1, 2020, for § 127.005.

(2) ASTM F1121–87 (Reapproved 2019), Standard Specification for International Shore Connections for Marine Fire Applications, approved December 1, 2019, for §§ 127.611 and 127.1511.

(d) Det Norske Veritas (DNV), Veritasveien 1, 1363 Høvik Norway, +47 6757 9900, <https://www.dnv.com>.

(1) DNVGL-RP-G105, Recommended Practice, Development and operation of liquefied natural gas bunkering facilities, October 2015 Edition, for § 127.008(d).

(2) [Reserved]

(e) International Electrotechnical Commission (IEC), IEC Central Office, 3 rue de Varembé, P.O. Box 131, CH 1211, Geneva 20, Switzerland, +41 22 919 02 11, <https://www.iec.ch>.

(1) IEC 60079-29-1, Explosive atmospheres – Part 29-1: Gas detectors – Performance requirements of detectors for flammable gases, Edition 2.0, July 2016, for § 127.1203(a).

(2) [Reserved]

(f) International Organization for Standardization (ISO), Chemin de Blandonnet 8, CP 401, 1214 Vernier, Geneva, Switzerland, +41 22 749 01 11, <https://www.iso.org>.

(1) ISO/TS 18683:2015(E), (“ISO/TS 18683”), Guidelines for systems and installations for supply of LNG as fuel to ships, First Edition, January 15, 2015, for § 127.008(d)(1).

(2) ISO 28460:2010(E), (“ISO 28460”), Petroleum and natural gas industries – Installation and equipment for liquefied natural gas – Ship-to-shore interface and port operations, First edition, December 15, 2010, for § 127.008(d)(2).

(g) National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, MA 02169-7471, 800-344-3555, <https://www.nfpa.org>.

(1) NFPA 10, Standard for Portable Fire Extinguishers, 2018 Edition, effective August 21, 2017, for §§ 127.603(a) and 127.1503.

(2) NFPA 30, Flammable and Combustible Liquids Code, 2018 Edition, effective September 6, 2017, for §§ 127.313(b) and 127.1313(b).

(3) NFPA 51B, Standard for Fire Prevention During Welding, Cutting, and Other Hot Work, 2019 Edition, effective July 15, 2018, for §§ 127.405(b) and 127.1405(b).

(4) NFPA 59A, Standard for the Production, Storage, and Handling of Liquefied Natural Gas (LNG), 2019 Edition, effective November 25, 2018, for §§ 127.008(d), 127.101, 127.201(b) and (c), 127.405(a) and (b), and 127.603(a).

(5) NFPA 70, National Electrical Code, 2020 Edition, effective August 25, 2019, for §§ 127.107(a) and (c), 127.201(c), and 127.1107.

4. In § 127.005, revise the definitions of “Facility” and “Fire endurance rating” and add a definition for “LNG fuel facility” in alphabetical order to read as follows:

§ 127.005 Definitions.

* * * * *

Facility means either a waterfront facility handling LHG or a waterfront facility handling LNG, and includes LNG fuel facilities.

Fire endurance rating means the duration for which an assembly or structural unit will contain a fire or retain structural integrity when exposed to the temperatures specified in the standard time-temperature curve in ASTM E119-20 (incorporated by reference, see § 127.003).

* * * * *

LNG fuel facility means a waterfront facility that handles LNG for the sole purpose of providing LNG from shore-based structures to vessels for use as a marine

fuel, and that does not transfer LNG to or receive LNG from vessels capable of carrying LNG in bulk as cargo.

* * * * *

5. Amend § 127.007 by:

- a. Revising the section heading, and paragraphs (a), (b), and (e); and
- b. Adding paragraph (i).

The revisions and addition read as follows:

§ 127.007 Letter of intent and waterway suitability assessment for waterfront facilities handling LNG or LHG.

(a) An owner or operator intending to build a new facility handling LNG or LHG, or an owner or operator planning new construction to expand marine terminal operations in any facility handling LNG or LHG, where the construction or expansion will result in an increase in the size or frequency of LNG or LHG marine traffic on the waterway associated with a facility, must submit a Letter of Intent (LOI) to the Captain of the Port (COTP) of the zone in which the facility is or will be located. The LOI must meet the requirements in paragraph (c) of this section.

(1) The owner or operator of an LNG facility must submit the LOI to the COTP no later than the date that the owner or operator files a pre-filing request with the Federal Energy Regulatory Commission (FERC) under 18 CFR parts 153 and 157, but, in all cases, at least 1 year prior to the start of construction. The LOI must include the nation of registry for, and the nationality or citizenship of the officers and crew serving on board, vessels transporting LNG that are reasonably anticipated to be servicing the LNG facility.

(2) The owner or operator of an LHG facility must submit the LOI to the COTP no later than the date that the owner or operator files with the Federal or State agency having jurisdiction, but, in all cases, at least 1 year prior to the start of construction.

(b) An owner or operator intending to reactivate an inactive facility must submit an LOI that meets paragraph (c) of this section to the COTP of the zone in which the facility is located.

(1) The owner or operator of an LNG facility must submit the LOI to the COTP no later than the date the owner or operator files a pre-filing request with FERC under 18 CFR parts 153 and 157, but, in all cases, at least 1 year prior to the start of LNG transfer operations.

(2) The owner or operator of an LHG facility must submit the LOI to the COTP no later than the date the owner or operator files with the Federal or State agency having jurisdiction, but, in all cases, at least 1 year prior to the start of LHG transfer operations.

* * * * *

(e) An owner or operator intending to build a new LNG or LHG facility, or an owner or operator planning new construction to expand marine terminal operations in any facility handling LNG or LHG, where the construction or expansion will result in an increase in the size or frequency of LNG or LHG marine traffic on the waterway associated with a facility, must file or update as appropriate a waterway suitability assessment (WSA) with the COTP of the zone in which the facility is or will be located. The WSA must consist of a Preliminary WSA and a Follow-on WSA. A COTP may request additional information during review of the Preliminary WSA or Follow-on WSA.

* * * * *

(i) An owner or operator intending to construct a new LNG fuel facility or modify any LNG fuel facility, or reactivate an inactive LNG fuel facility, may comply with § 127.008 in lieu of meeting the requirements in this section.

6. Add § 127.008 to read as follows:

§ 127.008 Letter of intent and operational risk assessment for LNG fuel facilities.

(a) An owner or operator intending to build a new LNG fuel facility, modify construction of any LNG fuel facility, or reactivate an inactive LNG fuel facility electing to complete an operational risk assessment (ORA) in lieu of a WSA as outlined in § 127.007, must submit an LOI and ORA to the COTP of the zone in which the LNG fuel facility is or will be located at least 1 year prior to the start of LNG transfer operations.

(b) Each LOI must contain the information in § 127.007(c)(1) through (c)(5).

(c) The owner or operator who submits an LOI under paragraph (a) of this section must notify the COTP in writing within 15 days of any of the following:

(1) There is any change in the information submitted under paragraph (b) of this section; or

(2) No LNG fuel transfer operations are scheduled within the next 12 months.

(d) The ORA required by paragraph (a) must:

(1) Be carried out in accordance with Chapter 7 of ISO/TS 18683 and Appendix D of DNVGL-RP-G105; or Chapter 19 of NFPA 59A (all incorporated by reference, see § 127.003); or other industry developed risk assessment method acceptable to the Office of Operating and Environmental Standards, Commandant (CG-OES); and

(2) Consider possible factors affecting the ship/shore interface and port operations described in Section 6 of ISO 28460 (incorporated by reference, see § 127.003).

7. In § 127.009, revise paragraph (a) introductory text and paragraph (a)(1) to read as follows:

§ 127.009 Letter of recommendation

(a) After the COTP receives the information and analyses required by § 127.007 or § 127.008, the COTP issues a Letter of Recommendation (LOR) as to the suitability of the waterway for LNG or LHG marine traffic or the operational safety and security of the LNG fuel facility to the Federal, State, or local government agencies having jurisdiction for siting, construction, and operation, and, at the same time, sends a copy to the owner or

operator, based on the—

- (1) Information submitted under § 127.007 or § 127.008;

* * * * *

§ 127.011 [Amended]

8. Amend § 127.011 by removing the word “shall” and adding, in its place, the word “must”.

9. In § 127.015, revise paragraphs (c)(1) and (d) to read as follows:

§ 127.015 Appeals.

* * * * *

(c) * * *

(1) Appeal that ruling in writing to the Assistant Commandant for Prevention Policy, U.S. Coast Guard, (CG-5P), 2703 Martin Luther King Jr. Ave. SE, Stop 7509, Washington, DC 20593-7509; and

* * * * *

(d) The Assistant Commandant for Prevention Policy issues a ruling after reviewing the appeal submitted under paragraph (c) of this section, which is final agency action.

* * * * *

10. In § 127.017, revise the paragraph (a) introductory text to read as follows:

§ 127.017 Alternatives.

(a) The COTP may allow alternative procedures, methods, or equipment standards, including alternatives to standards listed in § 127.003, to be used by an operator instead of any requirements in this part if—

* * * * *

11. Revise § 127.101 to read as follows:

§ 127.101 Design and construction: General.

The marine transfer area for LNG must meet the following criteria in NFPA 59A (incorporated by reference, see § 127.003):

- (a) Chapter 5, Section 5.3.1.7;
- (b) Chapter 6, Section 6.7;
- (c) Chapter 10;
- (d) Chapter 11, except Sections 11.9, and 11.10;
- (e) Chapter 12;
- (f) Chapter 15, except Sections 15.4 and 15.6; and
- (g) Annex B.

12. In § 127.107, revise paragraphs (a) and (c) to read as follows:

§ 127.107 Electrical power systems.

(a) The electrical power system must have a power source and a separate emergency power source, so that failure of one source does not affect the capability of the other source. The system must meet NFPA 70 (incorporated by reference, see § 127.003).

* * * * *

(c) If an auxiliary generator is used as an emergency power source, it must meet Section 700.12 of NFPA 70 (incorporated by reference, see § 127.003).

13. In § 127.201, revise paragraphs (b)(2) and (c)(1) and (2) to read as follows:

§ 127.201 Sensing and alarm systems.

* * * * *

(b) * * *

(2) Meet Section 16.4 of NFPA 59A (incorporated by reference, see §127.003).

(c) * * *

(1) Be in each enclosed or covered Class I, Division 1, hazardous location defined in Section 500.5(B)(1) of NFPA 70 (incorporated by reference, see § 127.003) and each

area in which flammable or combustible material is stored; and

(2) Meet Section 16.4 of NFPA 59A (incorporated by reference, see § 127.003).

§ 127.301 [Amended]

14. In § 127.301(b), remove the word “shall” wherever it appears, and add, in its place, the word “must”.

§ 127.311 [Amended]

15. In § 127.311(a), remove the word “shall” and add, in its place, the word “must”.

§ 127.313 [Amended]

16. Amend § 127.313 by:

a. In paragraph (a), removing the word “shall” and adding, in its place, the word “must”; and

b. In paragraph (b), removing the text “Chapter 4 of NFPA 30” and adding, in its place, the text “NFPA 30 (incorporated by reference, see § 127.003)”.

§ 127.315 [Amended]

17. In § 127.315 introductory text, remove the word “shall” and add, in its place, the word “must”.

§ 127.317 [Amended]

18. In § 127.317(a) and (b), remove the word “shall” wherever it appears, and add, in its place, the word “must”.

§ 127.319 [Amended]

19. In § 127.319(a) and (b), remove the word “shall” wherever it appears and add, in its place, the word “must”.

§ 127.321 [Amended]

20. In § 127.321, remove the word “shall” wherever it appears and add, in its place, the word “must”.

§ 127.401 [Amended]

21. In § 127.401, remove the word “shall” and add, in its place, the word “must”.

§ 127.403 [Amended]

22. In § 127.403, remove the word “shall” and add, in its place, the word “must”.

23. In § 127.405, revise the introductory text and paragraphs (a)(1) and (b) to read as follows:

§ 127.405 Repairs.

The operator must ensure that—

(a) * * *

(1) The equipment continues to meet the applicable requirements in this subpart and in NFPA 59A (incorporated by reference, see § 127.003); and

* * * * *

(b) Welding is done in accordance with NFPA 51B and Section 10.4.3 of NFPA 59A (both incorporated by reference, see § 127.003).

§ 127.407 [Amended]

24. In § 127.407(a), remove the word “shall” and add, in its place, the word “must”.

§ 127.409 [Amended]

25. In § 127.409(a), remove the word “shall” and add, in its place, the word “must”.

26. In § 127.603, revise paragraph (a) to read as follows:

§ 127.603 Portable fire extinguishers.

* * * * *

(a) Portable fire extinguishers that meet Section 16.6.1 of NFPA 59A and Chapter 6 of NFPA 10 (both incorporated by reference, see § 127.003); and

* * * * *

§ 127.611 [Amended]

27. In § 127.611, remove the text “ASTM F 1121” and add, in its place, the text “ASTM F1121-87 (Reapproved 2019)”.

§ 127.613 [Amended]

28. In § 127.613, remove the word “shall” and add, in its place, the word “must”.

§ 127.615 [Amended]

29. In § 127.615, remove the word “shall” and add, in its place, the word “must”.

§ 127.617 [Amended]

30. In § 127.617, remove the word “shall” and add, in its place, the word “must”.

§§ 127.701 through 127.711 [Removed]

31. Remove §§ 127.701 through 127.711, including the undesignated center heading “Security” that precedes § 127.701.

§ 127.1101 [Amended]

32. Amend § 127.1101 by:

a. In paragraph (a), removing the text “ASME B31.3” and adding, in its place, the text “ASME B31.3-2020 (incorporated by reference, see § 127.003)”;

b. In paragraph (h), after the text “API RP 2003” adding the text “(incorporated by reference, see § 127.003)”.

§ 127.1102 [Amended]

33. In § 127.1102(a)(4)(ii), remove the text “ANSI B16.5” and add, in its place, the text “ASME B16.5-2020 (incorporated by reference, see § 127.003)”.

§ 127.1103 [Amended]

34. In § 127.1103, remove the word “existing” wherever it appears.

§ 127.1105 [Amended]

35. In § 127.1105 introductory text, remove the word “existing”.

§ 127.1107 [Amended]

36. In § 127.1107, after the text “NFPA 70” add the text “(incorporated by reference, see § 127.003)”.

§ 127.1203 [Amended]

37. In § 127.1203(a), remove the text “ANSI S12.13, Part I” and add, in its place, the text “IEC 60079-29-1 (incorporated by reference, see § 127.003)”.

§ 127.1207 [Amended]

38. In § 127.1207(c), remove the word “shall” and add, in its place, the word “must”.

§ 127.1301 [Amended]

39. In § 127.1301(b), remove the word “shall” and add, in its place, the word “must”.

§ 127.1302 [Amended]

40. In § 127.1302(a) introductory text and (c), remove the word “shall” wherever it appears, and add, in its place, the word “must”.

§ 127.1311 [Amended]

41. In § 127.1311, remove the word “shall” wherever it appears, and add, in its place, the word “must”.

§ 127.1313 [Amended]

42. Amend § 127.1313 as follows:

a. In paragraph (a), remove the word “shall” and add, in its place, the word “must”; and

b. In paragraph (b),

i. Remove the word “shall” and add, in its place, the word “must”; and

ii. Remove the text, “Chapter 4 of NFPA 30”; and add, in its place the text “NFPA 30 (incorporated by reference, see § 127.003)”.

§ 127.1315 [Amended]

43. In § 127.1315 introductory text, remove the word “shall” and add, in its place, the word “must”.

§ 127.1317 [Amended]

44. In § 127.1317(a), (d), and (e), remove the word “shall” wherever it appears, and add, in its place, the word “must”.

§ 127.1319 [Amended]

45. In § 127.1319, remove the word “shall” wherever it appears, and add, in its place, the word “must”.

§ 127.1321 [Amended]

46. In § 127.1321, remove the word “shall” wherever it appears, and add, in its place, the word “must”.

§ 127.1325 [Amended]

47. In § 127.1325 introductory text, remove the word “shall” and add, in its place, the word “must”.

§ 127.1401 [Amended]

48. In § 127.1401, remove the word “shall” and add, in its place, the word “must”.

§ 127.1403 [Amended]

49. In § 127.1403, remove the word “shall” wherever it appears, and add, in its place, the word “must”.

§ 127.1405 [Amended]

50. Amend § 127.1405 as follows:

- a. In the introductory text, remove the word “shall” and add, in its place, the word “must”;
- b. In paragraph (a)(1), remove the word “and”; and
- c. In paragraph (b), after the text “NFPA 51B”, add the text “(incorporated by reference, see § 127.003)”.

§ 127.1407 [Amended]

51. In § 127.1407(a) introductory text and paragraphs (c), (d), (e), and (f), remove the word “shall” wherever it appears, and add, in its place, the word “must”.

§ 127.1409 [Amended]

52. In § 127.1409, remove the word “shall” wherever it appears, and add, in its place, the word “must”.

§ 127.1501 [Amended]

53. In § 127.1501(a), delete the word “existing.”

§ 127.1503 [Amended]

54. In § 127.1503, after the text “NFPA 10”, add the text “(incorporated by reference, see § 127.003)”.

§ 127.1511 [Amended]

55. In § 127.1511, remove the text “ASTM F 1121” and add, in its place, the text “ASTM F1121-87 (Reapproved 2019)”.

§ 127.1601 [Amended]

56. In § 127.1601 introductory text, remove the word “shall” and add, in its place, the word “must”.

§ 127.1603 [Amended]

57. In § 127.1603 introductory text, remove the word “shall” and add, in its place, the word “must”.

§ 127.1605 [Amended]

58. In § 127.1605 introductory text, remove the word “shall” and add, in its place, the word “must”.

Dated: January 24, 2022.

J. W. Mauger

Rear Admiral, U.S. Coast Guard,

Assistant Commandant for Prevention Policy.

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